

Datasheet: MCA749F

BATCH NUMBER 1602

Description:	MOUSE ANTI GUINEA PIG CD4:FITC
Specificity:	CD4
Format:	FITC
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	▪			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	Guinea Pig		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein G.		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Guinea pig peritoneal T-cells.
RRID	AB_322605
Fusion Partners	Spleen cells from immunised 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. Baker, D. <i>et al.</i> (1987) Changes in lymphocyte subsets after treatment with cyclophosphamide and during the development of contact sensitivity in the guinea pig. Int J Immunopharmacol. 9 (2): 175-83. 3. 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. 4. 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. 5. 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. 6. Shang, S. <i>et al.</i> (2011) Activities of TMC207, rifampin, and pyrazinamide against Mycobacterium tuberculosis infection in guinea pigs. Antimicrob Agents Chemother. 55 (1): 124-31. 7. Lacy, H.M. <i>et al.</i> (2011) Essential role for neutrophils in pathogenesis and adaptive immunity in <i>Chlamydia caviae</i> ocular infections. Infect Immun. 79 (5): 1889-97. 8. 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. 9. Jeevan, A. <i>et al.</i> (2003) Differential expression of gamma interferon mRNA induced by attenuated and virulent Mycobacterium tuberculosis in guinea pig cells after <i>Mycobacterium bovis</i> BCG vaccination. Infect Immun. 71: 354-64. 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. 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. 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. Mishra, N.C. <i>et al.</i> (2010) Sulfur mustard induces immune sensitization in hairless guinea pigs. Int Immunopharmacol. 10: 193-9.

14. Hiromatsu, K. *et al.* (2002) Induction of CD1-restricted immune responses in guinea pigs by immunization with mycobacterial lipid antigens. [J Immunol. 169: 330-9.](#)
15. Dascher, C.C. *et al.* (1999) Conservation of a CD1 multigene family in the guinea pig. [J Immunol. 163: 5478-88.](#)
16. Rousseau, C. *et al.* (2003) Sulfolipid Deficiency Does Not Affect the Virulence of *Mycobacterium tuberculosis* H37Rv in Mice and Guinea Pigs [Infect Immun. 71: 4684-90.](#)
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. Chitano, P. *et al.* (2014) Ovalbumin sensitization of guinea pig at birth prevents the ontogenetic decrease in airway smooth muscle responsiveness. [Physiol Rep. 2 \(12\)Dec 11 \[Epub ahead of print\].](#)
19. 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.](#)
20. 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.](#)
21. 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.](#)
22. Yang H *et al.* (2011) Three protein cocktails mediate delayed-type hypersensitivity responses indistinguishable from that elicited by purified protein derivative in the guinea pig model of *Mycobacterium tuberculosis* infection. [Infect Immun. 79 \(2\): 716-23.](#)
23. 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.](#)
24. 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.](#)

Storage

Store at +4°C for one month or at -20°C for longer.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. 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 #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA749F>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

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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
'M368876:200529'

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