Datasheet: MCA749F

BATCH NUMBER 171656

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 from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
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 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

1. Tan, B.T. *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (1999) Conservation of a CD1 multigene family in the guinea pig. J Immunol. 163: 5478-88.
6. 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.
7. 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.
8. Jeevan, A. *et al.* (2003) Differential expression of gamma interferon mRNA induced by attenuated and virulent Mycobacterium tuberculosis in guinea pig cells after *Mycobacterium bovis* BCG vaccination. Infect Immun. 71: 354-64.
9. Turner, O.C. *et al.* (2003) Immunopathogenesis of pulmonary granulomas in the guinea pig after infection with *Mycobacterium tuberculosis*. Infect Immun. 71: 864-71.
10. Schleiss, M.R. *et al.* (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. *et al.* (2010) Sulfur mustard induces immune sensitization in hairless guinea pigs. Int Immunopharmacol. 10: 193-9.
12. Wang, Y. *et al.* (2010) Local host response to chlamydial urethral infection in male guinea pigs. Infect Immun. 78: 1670-81.
13. 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.
14. Komori, T. *et al.* (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. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
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
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

'M410617:221028'

Printed on 29 Jan 2026