

Datasheet: MCA799A647

Description:	MOUSE ANTI RABBIT CD4:Alexa Fluor® 647
Specificity:	CD4
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	KEN-4
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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 product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Rabbit								
Species Cross Reactivity	Reacts with: Brown Hare (Lepus europeus) N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.								
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>Alexa Fluor®647</td><td>650</td><td>665</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®647	650	665		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
Alexa Fluor®647	650	665							
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant								
Buffer Solution	Phosphate buffered saline								

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Rabbit thymocytes.
External Database Links	UniProt: P46630 Related reagents Entrez Gene: 100009152 CD4 Related reagents
Fusion Partners	Spleen cells from immunized mice were fused with cells of the mouse PAI myeloma cell line.
Specificity	Mouse anti Rabbit CD4 antibody, clone KEN-4 recognizes the rabbit CD4 cell surface antigen, also known as T-cell surface antigen T4/Leu-3. Rabbit CD4 is a 434 amino acid, with an additional N-terminal signal peptide ~50 kDa cell surface single pass, type I transmembrane glycoprotein expressed by T helper cells. Mouse anti Rabbit CD4 antibody, clone KEN-4 blocks the allogeneic mixed lymphocyte reaction response.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
References	1. Perosa, F. and Dammacco, F. (1994) Anti-idiotypic monoclonal antibodies (mAb) to an anti-CD4 mAb induce CD4+ T cell depletion in rabbit. Int J Clin Lab Res. 24: 208-12. 2. Renaux, S. <i>et al.</i> (2003) Dynamics and responsiveness of T-lymphocytes in secondary lymphoid organs of rabbits developing immunity to <i>Eimeria intestinalis</i>. Vet Parasitol. 110 (3-4): 181-95. 3. Dewals, B. <i>et al.</i> (2008) Malignant catarrhal fever induced by alcelaphine herpesvirus 1 is associated with proliferation of CD8+ T cells supporting a latent infection. PLoS ONE 3: e1627. 4. Pakandl, M. <i>et al.</i> (2008) Dependence of the immune response to coccidiosis on the age of rabbit suckling. Parasitol Res. 103 (6): 1265-71. 5. Yang, J. <i>et al.</i> (2009) Expression and localization of rabbit B-cell activating factor (BAFF) and its specific receptor BR3 in cells and tissues of the rabbit immune system. Dev Comp Immunol. 33 (5): 697-708. 6. Chentoufi, A.A. <i>et al.</i> (2010) A novel HLA (HLA-A*0201) transgenic rabbit model for preclinical evaluation of human CD8+ T cell epitope-based vaccines against ocular herpes. J Immunol. 184: 2561-71. 7. Rütgen, B.C. <i>et al.</i> (2014) Exploratory assessment of CD4+ T lymphocytes in brown hares (<i>Lepus europeus</i>) using a cross-reactive anti-rabbit CD4 antibody. Vet Immunol Immunopathol. 161 (1-2): 108-15. 8. Parameswaran, N. <i>et al.</i> (2014) The A2 gene of alcelaphine herpesvirus-1 is a

- transcriptional regulator affecting cytotoxicity in virus-infected T cells but is not required for malignant catarrhal fever induction in rabbits. [Virus Res. 188: 68-80.](#)
9. Boutard, B. *et al.* (2015) The $\alpha 2,3$ -sialyltransferase encoded by myxoma virus is a virulence factor that contributes to immunosuppression. [PLoS One. 10 \(2\): e0118806.](#)
 10. Khan, A.A. *et al.* (2015) Therapeutic immunization with a mixture of herpes simplex virus 1 glycoprotein D-derived “asymptomatic” human CD8+ T-cell epitopes decreases spontaneous ocular shedding in latently infected HLA transgenic rabbits: association with low frequency of local PD-1+ TIM-3+ CD8+ exhausted T cells. [J Virol. 89 \(13\): 6619-32.](#)
 11. Myser, F. *et al.* (2015) Viral semaphorin inhibits dendritic cell phagocytosis and migration but is not essential for gammaherpesvirus-induced lymphoproliferation in malignant catarrhal fever. [J Virol. 89 \(7\): 3630-47.](#)
 12. Beghelli, D *et al.* (2016) Effects of Oregano (*Origanum vulgare* L.) and Rosemary (*Rosmarinus officinalis* L.) Aqueous Extracts On *in vitro* Rabbit Immune Responses [MOJ Immunology. 4 \(4\) \[Epub ahead of print\].](#)
 13. Sorel, O. *et al.* (2017) Macavirus latency-associated protein evades immune detection through regulation of protein synthesis in cis depending upon its glycin/glutamate-rich domain. [PLoS Pathog. 13 \(10\): e1006691.](#)
 14. Penadés, M. *et al.* (2018) Long-term implications of feed energy source in different genetic types of reproductive rabbit females. II. Immunologic status. [Animal. 12 \(9\): 1877-85.](#)
 15. Jeklova, E. *et al.* (2020) Characterization of humoral and cell-mediated immunity in rabbits orally infected with *Encephalitozoon cuniculi*. [Vet Res. 51 \(1\): 79.](#)
 16. Niedźwiedzka-Rystwej, P. *et al.* (2020) B and T lymphocytes in rabbits change according to the sex and throughout the year. [Pol J Vet Sci. 23 \(1\): 37-42.](#)
 17. Muñoz-Silvestre, A. *et al.* (2020) Pathogenesis of Intradermal Staphylococcal Infections: Rabbit Experimental Approach to Natural *Staphylococcus aureus* Skin Infections. [Am J Pathol. 190 \(6\): 1188-1210.](#)
 18. Largo, R.D. *et al.* (2020) VEGF Over-Expression by Engineered BMSC Accelerates Functional Perfusion, Improving Tissue Density and In-Growth in Clinical-Size Osteogenic Grafts. [Front Bioeng Biotechnol. 8: 755.](#)
 19. Niedźwiedzka-Rystwej, P. *et al.* (2022) Reactivity of selected markers of innate and adaptive immunity in rabbits experimentally infected with antigenic variants of RHD (Lagovirus europaeus/GI.1a). [Vet Res Commun. 46 \(1\): 233-42.](#)
 20. Dewals, B.G. & Vanderplasschen, A. (2011) Malignant catarrhal fever induced by Alcelaphine herpesvirus 1 is characterized by an expansion of activated CD3+CD8+CD4- T cells expressing a cytotoxic phenotype in both lymphoid and non-lymphoid tissues. [Vet Res. 42 \(1\): 95.](#)
 21. Li, H. *et al.* (2011) Characterization of ovine herpesvirus 2-induced malignant catarrhal fever in rabbits. [Vet Microbiol. 150 \(3-4\): 270-7.](#)
 22. Moreno-Grua, E. *et al.* (2023) Effect of selection for growth rate on the rabbit (*Oryctolagus cuniculus*) immune system and its response after experimental *Staphylococcus aureus* infection. [Vet Res Commun. 47 \(3\): 1547-1560.](#)
 23. Urselli, F. *et al.* (2025) Identification of antibodies induced by immunization with the syphilis vaccine candidate Tp0751. [Vaccine. 50: 126804.](#)
 24. Peixoto-Gonçalves, C. *et al.* (2025) Immunological studies on new rabbit paternal lines with different potentials for growth rate and resilience: pathways towards healthier animals. [Vet Res. 56 \(1\): 226.](#)

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.

Guarantee 12 months from date of despatch

Acknowledgements This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA799A647>

Regulatory For research purposes only

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
'M450225:260309'

Printed on 15 Jun 2026