

Datasheet: MCA609A488

BATCH NUMBER 160950

Description:	RAT ANTI MOUSE CD8 ALPHA:Alexa Fluor® 488			
Specificity:	CD8 ALPHA			
Other names:	LY-2			
Format:	ALEXA FLUOR® 488			
Product Type:	Monoclonal Antibody			
Clone:	KT15			
Isotype:	lgG2a			
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

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.

Product Form	Purified IgG conjugat	Purified IgG conjugated to Alexa Fluor® 488 - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm			
	Alexa Fluor®488	495	519			
Preparation	Purified IgG prepared supernatant	l by affinity chromatog	raphy on Protein G			
Buffer Solution	Phosphate buffered s	aline				
Preservative	0.09% Sodium Azide					
Stabilisers	1% Bovine Serum	Albumin				

Concentrations

T cell clone, C6	
<u> </u>	
Entrez Gene:	
12525 Cd8a <u>Related reagents</u>	
Lyt2, Lyt-2	
AB_322807	
Spleen cells from immunized SD rats were fused with cells of cell line	the NS0 mouse myeloma
Rat anti Mouse CD8α, clone KT15, recognizes the alpha chan heterodimeric protein composed of disulphide-linked CD8α and expressed primarily on cytotoxic T-cells. CD8 functions in the I-bearing targets and plays a role in T-cell-mediated killing (Natauchi, H. et al., 1987).	d <u>CD8β</u> chains that is interaction with MHC Class
Clone KT15 is reported to block T-cell-mediated cytotoxicity in <u>al., 2002</u>).	in vitro assays (Zeis, M. et
Use 10ul of the suggested working dilution to label 10 ⁶ cells in	n 100ul.
The Fc region of monoclonal antibodies may bind non-specific affinity Fc receptors. This may be reduced by using SeroBlock	
1. Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific ragainst a V beta 11-positive mouse T-cell clone. Immunogene 2. Whiteland, J.L. et al. (1995) Immunohistochemical detection leukocytes in paraffin-embedded rat and mouse tissues with note that the Histochem Cytochem. 43 (3): 313-20. 3. Lee, Y.L. et al (2003) Oral administration of Agaricus blazeing growth in a sarcoma 180 inoculation model. Exp Anim. 52: 37. 4. Eller, K. et al. (2011) IL-9 production by regulatory T cells researchial for regulatory T cell-induced immune suppression. Jobs. Grimm, M. et al. (2010) Evaluation of immunological escape model of colorectal liver metastases. BMC Cancer. 10: 82. 6. Liao, D. et al. (2009) Cancer Associated Fibroblasts Promometastasis by Modulating the Tumor Immune Microenvironmetal Cancer Model PLoS One. 4: e7965. 7. Moos, M.P. et al. (2005) The lamina adventitia is the major accumulation in standard chow-fed apolipoprotein E-deficient.	tics. 28 (6): 445-51. In of T-cell subsets and other monoclonal antibodies. J (H1 strain) inhibited tumor 1-5. In order to be a second to be
	Lyt2, Lyt-2 AB_322807 Spleen cells from immunized SD rats were fused with cells of cell line Rat anti Mouse CD8α, clone KT15, recognizes the alpha chan heterodimeric protein composed of disulphide-linked CD8α and expressed primarily on cytotoxic T-cells. CD8 functions in the I-bearing targets and plays a role in T-cell-mediated killing (Na Nakauchi, H. et al., 1987). Clone KT15 is reported to block T-cell-mediated cytotoxicity in al., 2002). Use 10ul of the suggested working dilution to label 10 ⁶ cells in The Fc region of monoclonal antibodies may bind non-specific affinity Fc receptors. This may be reduced by using SeroBlock 1. Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific ragainst a V beta 11-positive mouse T-cell clone. Immunogene 2. Whiteland, J.L. et al. (1995) Immunohistochemical detection leukocytes in paraffin-embedded rat and mouse tissues with mistochem Cytochem. 43 (3): 313-20. 3. Lee, Y.L. et al (2003) Oral administration of Agaricus blazei growth in a sarcoma 180 inoculation model. Exp Anim. 52: 37 4. Eller, K. et al. (2011) IL-9 production by regulatory T cells ressential for regulatory T cell-induced immune suppression. J. 5. Grimm, M. et al. (2010) Evaluation of immunological escape model of colorectal liver metastases. BMC Cancer. 10: 82. 6. Liao, D. et al. (2009) Cancer Associated Fibroblasts Promo Metastasis by Modulating the Tumor Immune Microenvironme Cancer Model PLoS One. 4: e7965.

Vasc Biol. 25: 2386-91.

- 8. Stevenson, P.G. *et al.* (2002) Uncoupling of virus-induced inflammation and anti-viral immunity in the brain parenchyma. <u>J Gen Virol. 83: 1735-43.</u>
- 9. Wang, X. *et al.* (2011) Quercetin and Bornyl Acetate Regulate T-Lymphocyte Subsets and INF-γ/IL-4 Ratio In Utero in Pregnant Mice. <u>Evid Based Complement Alternat Med.</u> 2011: 745262.
- 10. Zeis, M. *et al.* (2002) Idiotype protein-pulsed dendritic cells produce strong anti-myeloma effects after syngeneic stem cell transplantation in mice. <u>Bone Marrow Transplant.</u> 29: 213-21.
- 11. Ideguchi, M. *et al.* (2008) Immune or inflammatory response by the host brain suppresses neuronal differentiation of transplanted ES cell-derived neural precursor cells. J Neurosci Res. 86: 1936-43.
- 12. Wolf, D. *et al.* (2005) CD4+CD25+ regulatory T cells inhibit experimental anti-glomerular basement membrane glomerulonephritis in mice. <u>J Am Soc Nephrol. 16: 1360-70.</u>
- 13. Severinova, J. *et al.* (2005) Co-inoculation of *Borrelia afzelii* with tick salivary gland extract influences distribution of immunocompetent cells in the skin and lymph nodes of mice. Folia Microbiol (Praha). 50: 457-63.
- 14. Zaini, J. *et al.* (2007) OX40 ligand expressed by DCs costimulates NKT and CD4+ Th cell antitumor immunity in mice. <u>J Clin Invest. 117: 3330-8.</u>
- 15. Meyer, C. *et al.* (2011) Chronic inflammation promotes myeloid-derived suppressor cell activation blocking antitumor immunity in transgenic mouse melanoma model. <u>Proc Natl Acad Sci U S A. 108: 17111-6.</u>
- 16. Zitt, E. *et al.* (2011) The selective mineralocorticoid receptor antagonist eplerenone is protective in mild anti-GBM glomeru-lonephritis. Int J Clin Exp Pathol. 4:606-15.
- 17. Singh, V. *et al.* (2011) Co-administration of IL-1+IL-6+TNF-α with Mycobacterium tuberculosis infected macrophages vaccine induces better protective T cell memory than BCG. PLoS One. 6: e16097.
- 18. Kalyanasundaram Bhanumathy, K. *et al.* (2015) Potent immunotherapy against well-established thymoma using adoptively transferred transgene IL-6-engineered dendritic cell-stimulated CD8(+) T-cells with prolonged survival and enhanced cytotoxicity. <u>J Gene Med. 17 (8-9): 153-60.</u>
- 19. Abiko K *et al.* (2015) IFN-γ from lymphocytes induces PD-L1 expression and promotes progression of ovarian cancer. <u>Br J Cancer. 112 (9): 1501-9.</u>
- 20. Phan-Lai, V. *et al.* (2016) The Antitumor Efficacy of IL2/IL21-Cultured Polyfunctional Neu-Specific T Cells Is TNFα/IL17 Dependent. <u>Clin Cancer Res. 22 (9): 2207-16.</u>
- 21. Kajiwara, T. *et al.* (2016) Hypoxia augments MHC class I antigen presentation via facilitation of ERO1-α-mediated oxidative folding in murine tumor cells. <u>Eur J Immunol. 46</u> (12): 2842-51.
- 22. Srivastava, A.K. *et al.* (2016) Co-transplantation of syngeneic mesenchymal stem cells improves survival of allogeneic glial-restricted precursors in mouse brain. <u>Exp Neurol. 275 Pt 1: 154-61.</u>
- 23. Meier, R.P. *et al.* (2014) Survival of free and encapsulated human and rat islet xenografts transplanted into the mouse bone marrow. <u>PLoS One. 9 (3): e91268.</u>
 24. Groh, J. *et al.* (2021) Immune modulation attenuates infantile neuronal ceroid lipofuscinosis in mice before and after disease onset Brain Communications. 3(2):

fcab047.

25. Cecil, D.L. *et al.* (2022) COX-2 inhibitors decrease expression of PD-L1 in colon tumors and increase the influx of Type I tumor infiltrating lymphocytes. <u>Cancer Prev Res</u> (Phila). canprevres.0227.2021.

26. Karikari, A.A. *et al.* (2022) Neurodegeneration by α-synuclein-specific T cells in AAV-A53T-α-synuclein Parkinson's disease mice. <u>Brain Behav Immun. 101: 194-210.</u>
27. Badr, M. *et al.* (2022) Expansion of regulatory T cells by CD28 superagonistic antibodies attenuates neurodegeneration in A53T-α-synuclein Parkinson's disease mice. <u>J Neuroinflammation. 19 (1): 319.</u>

28. McFleder, R.L. *et al.* (2023) Brain-to-gut trafficking of alpha-synuclein by CD11c(+) cells in a mouse model of Parkinson's disease. Nat Commun. 14 (1): 7529.

29. Aloui, A. *et al.* (2023) AFM₁ Exposure in Male Balb/c Mice and Intervention Strategies Against Its Immuno-physiological toxicity using Clay Mineral and Lactic Acid Bacteria Alone or in Combination. Immunopharmacol Immunotoxicol. : 1-32.

30. Aringer, I. *et al.* (2021) Agonism of Prostaglandin E2 Receptor 4 Ameliorates Tubulointerstitial Injury in Nephrotoxic Serum Nephritis in Mice. J Clin Med. 10 (4):832.

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

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 purchase 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/MCA609A488

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL: Alexa Fluor® 488 (MCA1212A488)

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

Printed on 19 Jun 2025

© 2025 Bio-Rad Laboratories Inc | Legal | Imprint