

Datasheet: MCA609GT

Description:	RAT ANTI MOUSE CD8 ALPHA
Specificity:	CD8 ALPHA
Other names:	LY-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	KT15
Isotype:	IgG2a
Quantity:	25 µg

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	▪			1/50 - 1/100
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			
Functional Assays			▪	

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Mouse
Product Form	Purified IgG - liquid
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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	T cell clone, C6
External Database Links	<p>UniProt: P01731 Related reagents</p> <p>Entrez Gene: 12525 Cd8a Related reagents</p>
Synonyms	Lyt2, Lyt-2
RRID	AB_1102371
Fusion Partners	Spleen cells from immunized SD rats were fused with cells of the NS0 mouse myeloma cell line
Specificity	<p>Rat anti mouse CD8α, clone KT15, recognizes the alpha chain of mouse CD8. CD8 is a heterodimeric protein composed of disulphide-linked CD8α and CD8β chains that is expressed primarily on cytotoxic T-cells. CD8 functions in the interaction with MHC Class I-bearing targets and plays a role in T-cell-mediated killing (Nakauchi, H. et al., 1985 & Nakauchi, H. et al., 1987).</p> <p>Clone KT15 is reported to block T-cell-mediated cytotoxicity in <i>in vitro</i> assays (Zeis, M. et al., 2002).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific monoclonal antibodies against a V beta 11-positive mouse T-cell clone. Immunogenetics. 28 (6): 445-51. 2. Whiteland, J.L. et al. (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. J Histochem Cytochem. 43 (3): 313-20. 3. Lee, Y.L. et al (2003) Oral administration of Agaricus blazei (H1 strain) inhibited tumor growth in a sarcoma 180 inoculation model. Exp Anim. 52: 371-5. 4. Eller, K. et al. (2011) IL-9 production by regulatory T cells recruits mast cells that are essential for regulatory T cell-induced immune suppression. J Immunol. 186: 83-91. 5. Grimm, M. et al. (2010) Evaluation of immunological escape mechanisms in a mouse model of colorectal liver metastases. BMC Cancer. 10: 82. 6. Liao, D. et al. (2009) Cancer Associated Fibroblasts Promote Tumor Growth and

- Metastasis by Modulating the Tumor Immune Microenvironment in a 4T1 Murine Breast Cancer Model [PLoS One. 4: e7965.](#)
7. Moos, M.P. *et al.* (2005) The lamina adventitia is the major site of immune cell accumulation in standard chow-fed apolipoprotein E-deficient mice. [Arterioscler Thromb 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. [J Gen Virol. 83: 1735-43.](#)
 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. [Evid Based Complement Alternat Med. 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. [Bone Marrow Transplant. 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. [J Am Soc Nephrol. 16: 1360-70.](#)
 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. [J Clin Invest. 117: 3330-8.](#)
 15. Meyer, C. *et al.* (2011) Chronic inflammation promotes myeloid-derived suppressor cell activation blocking antitumor immunity in transgenic mouse melanoma model. [Proc Natl Acad Sci U S A. 108: 17111-6.](#)
 16. Zitt, E. *et al.* (2011) The selective mineralocorticoid receptor antagonist eplerenone is protective in mild anti-GBM glomerulonephritis. [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. [J Gene Med. 17 \(8-9\): 153-60.](#)
 19. Abiko K *et al.* (2015) IFN- γ from lymphocytes induces PD-L1 expression and promotes progression of ovarian cancer. [Br J Cancer. 112 \(9\): 1501-9.](#)
 20. Phan-Lai, V. *et al.* (2016) The Antitumor Efficacy of IL2/IL21-Cultured Polyfunctional Neu-Specific T Cells Is TNF α /IL17 Dependent. [Clin Cancer Res. 22 \(9\): 2207-16.](#)
 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. [Eur J Immunol. Sep 26. \[Epub ahead of print\]](#)
 22. Srivastava, A.K. *et al.* (2016) Co-transplantation of syngeneic mesenchymal stem cells improves survival of allogeneic glial-restricted precursors in mouse brain. [Exp Neurol. 275 Pt 1: 154-61.](#)
 23. Meier, R.P. *et al.* (2014) Survival of free and encapsulated human and rat islet

xenografts transplanted into the mouse bone marrow. [PLoS One. 9 \(3\): e91268.](#)
24. Groh, J. *et al.* (2021) Immune modulation attenuates infantile neuronal ceroid lipofuscinosis in mice before and after disease onset [Brain Communications. fcab047 \[Epub ahead of print\].](#)

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. 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 #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®800
Goat Anti Rat IgG (STAR72...)	HRP
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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](https://www.bio-rad-antibodies.com/datasheets)
'M375927:210114'

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