

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 A 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	UniProt: P01731 Related reagents Entrez Gene: 12525 Cd8a Related reagents
Synonyms	Lyt2, Lyt-2
Fusion Partners	Spleen cells from immunised SD rats were fused with cells of the NS0 mouse myeloma cell line
Specificity	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). Clone KT15 is reported to block T-cell-mediated cytotoxicity in <i>in vitro</i> assays (Zeis, M. et al., 2002).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	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) Idiotypic 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.

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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.](#)
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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.
Shelf Life	18 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

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC

Goat Anti Rat IgG (STAR72...)

[HRP](#)

Recommended Negative Controls

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

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