

Datasheet: MCA609FB BATCH NUMBER 148453

Description:	RAT ANTI MOUSE CD8 ALPHA:FITC
Specificity:	CD8 ALPHA
Other names:	LY-2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	KT15
Isotype:	IgG2a
Quantity:	0.5 mg

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

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	Mouse		
Product Form	Purified IgG conjugate	ed to Fluorescein Isoth	niocyanate Isomer ′
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	FITC	490	525
Buffer Solution	Supernatant Phosphate buffered sa	aline	
reservative tabilisers	0.09% Sodium Azide		
	1% Bovine Serum	Albumin	
Approx. Protein	IgG concentration 0.5	mg/ml	

Concentrations

T cell clone, C6	
UniProt:	
<u>P01731</u> <u>Related reagents</u>	
Entrez Gene:	
12525 Cd8a Related reagents	
Lyt2, Lyt-2	
AB_324628	
Spleen cells from immunized SD rats were fused with cells of the NS0 mouse mye cell line	eloma
Rat anti mouse CD8α, clone KT15, recognizes the alpha chain of mouse CD8. On the terodimeric protein composed of disulphide-linked CD8α and CD8β chains that expressed primarily on cytotoxic T-cells. CD8 functions in the interaction with MHC I-bearing targets and plays a role in T-cell-mediated killing (Nakauchi, H. et al., 1987).	is Class
Clone KT15 is reported to block T-cell-mediated cytotoxicity in <i>in vitro</i> assays (Zeis al., 2002).	s, M. <i>et</i>
Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.	
The Fc region of monoclonal antibodies may bind non-specifically to cells express affinity Fc receptors. This may be reduced by using SeroBlock FcR (<u>BUF041A/B</u>)	_
 Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific monoclonal antibodic against a V beta 11-positive mouse T-cell clone. <u>Immunogenetics</u>. 28 (6): 445-51. Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets at leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodic <u>Histochem Cytochem</u>. 43 (3): 313-20. Lee, Y.L. <i>et al</i> (2003) Oral administration of Agaricus blazei (H1 strain) inhibited growth in a sarcoma 180 inoculation model. <u>Exp Anim</u>. 52: 371-5. Eller, K. <i>et al</i>. (2011) IL-9 production by regulatory T cells recruits mast cells the essential for regulatory T cell-induced immune suppression. <u>J Immunol</u>. 186: 83-9 Grimm, M. <i>et al</i>. (2010) Evaluation of immunological escape mechanisms in a model of colorectal liver metastases. <u>BMC Cancer</u>. 10: 82. Liao, D. <i>et al</i>. (2009) Cancer Associated Fibroblasts Promote Tumor Growth an Metastasis by Modulating the Tumor Immune Microenvironment in a 4T1 Murine E Cancer Model <u>PLoS One</u>. 4: e7965. Moos, M.P. <i>et al</i>. (2005) The lamina adventitia is the major site of immune cell accumulation in standard chow-fed apolipoprotein E-deficient mice. Arterioscler Trees. 	tumor at are 1. nouse d
	UniProt: P01731 Related reagents Entrez Gene: 12525 Cd8a Related reagents Lyt2, Lyt-2 AB_324628 Spleen cells from immunized SD rats were fused with cells of the NS0 mouse mycell line Rat anti mouse CD8α, clone KT15, recognizes the alpha chain of mouse CD8. Cheterodimeric protein composed of disulphide-linked CD8α and CD86 chains that expressed primarily on cytotoxic T-cells. CD8 functions in the interaction with MHC I-bearing targets and plays a role in T-cell-mediated killing (Nakauchi, H. et al., 15 Nakauchi, H. et al., 1987). Clone KT15 is reported to block T-cell-mediated cytotoxicity in <i>in vitro</i> assays (Zeis al., 2002). Use 10ul of the suggested working dilution to label 10 ⁶ cells in 10ul. The Fc region of monoclonal antibodies may bind non-specifically to cells express affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B). 1. Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific monoclonal antibodic 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 an leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodic Histochem Cytochem. 43 (3): 313-20. 3. Lee, Y.L. et al (2003) Oral administration of Agaricus blazei (H1 strain) inhibited growth in a sarcoma 180 inoculation model. Exp Anim. 52: 371-5. 4. Eller, K. et al. (2001) II-9 production by regulatory T cells recruits mast cells the essential for regulatory T cell-induced immune suppression. J Immunol. 186: 83-9. 5. Grimm, M. et al. (2010) Evaluation of immunological escape mechanisms in a model of colorectal liver metastases. BMC Cancer. 10: 82. 6. Liao, D. et al. (2009) Cancer Associated Fibroblasts Promote Tumor Growth an Metastasis by Modulating the Tumor Immune Microenvironment in a 4T1 Murine Ecancer 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.</u> <u>Sep 26. [Epub ahead of print]</u>
- 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 <u>Brain Communications</u>. fcab047 [Epub ahead of print].

Storage	Store at +4°C or at -20°C if preferred.
	This product should be stored undiluted.
	Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.
	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 #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA609FB 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:FITC (MCA1212F)

North & South Tel: +1 800 265 7376
America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-rad.com

Email: antibody_sales_uk@bio-rad.com

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375944:210114'

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