

Datasheet: MCA609APCT

BATCH NUMBER INN1702

Description:	RAT ANTI MOUSE CD8 ALPHA:APC	
Specificity:	CD8 ALPHA	
Other names:	LY-2	
Format:	APC	
Product Type:	Monoclonal Antibody	
Clone:	KT15	
Isotype:	lgG2a	
Quantity:	25 TESTS	

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 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 conjuga	Purified IgG conjugated to Allophycocyanin (APC) - lyophilised				
Reconstitution	Reconstitute with 0.2	Reconstitute with 0.25ml distilled water				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
	APC	650	661			
Buffer Solution	Phosphate buffered	saline				
Preservative	0.09% Sodium Azido	Э				
Stabilisers	1% Bovine Serum Albumin					
	5% Sucrose					
Immunogen	T cell clone, C6					

External Database Links

UniProt:

P01731 Related reagents

Entrez Gene:

12525 Cd8a Related reagents

Synonyms

Lyt2, Lyt-2

RRID

AB 2075235

Fusion Partners

Spleen cells from immunized SD rats were fused with cells of the NS0 mouse myeloma cell line

Specificity

Rat anti mouse CD8α, clone KT15, recognizes the <u>alpha chain of mouse CD8</u>. CD8 is a heterodimeric protein composed of disulphide-linked CD8α and <u>CD8β</u> 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 (<u>Nakauchi</u>, H. et al., 1985).

Clone KT15 is reported to block T-cell-mediated cytotoxicity in *in vitro* assays (<u>Zeis, M. et</u> al., 2002).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (<u>BUF041A/B</u>).

References

- 1. Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific monoclonal antibodies against a V beta 11-positive mouse T-cell clone. <u>Immunogenetics</u>. 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. <u>J Histochem Cytochem. 43 (3): 313-20.</u>
- 3. Lee, Y.L. *et al* (2003) Oral administration of Agaricus blazei (H1 strain) inhibited tumor growth in a sarcoma 180 inoculation model. <u>Exp Anim. 52: 371-5.</u>
- 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. <u>J Immunol. 186: 83-91.</u>
- 5. Grimm, M. *et al.* (2010) Evaluation of immunological escape mechanisms in a mouse model of colorectal liver metastases. <u>BMC Cancer.</u> 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 <u>PLoS One. 4: e7965.</u>
- 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. <u>Arterioscler Thromb</u> 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:</u> 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. <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. <u>Int J Clin Exp Pathol. 4:606-15.</u>
- 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. <u>PLoS One. 6: e16097.</u>
- 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. <u>Br J Cancer.</u> 112 (9): 1501-9.
- 20. Phan-Lai, V. *et al.* (2016) The Antitumor Efficacy of IL2/IL21-Cultured Polyfunctional Neu-Specific T Cells Is TNFα/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. <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. 3(2): fcab047.</u>

Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA609APCT 20487
Regulatory	For research purposes only

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700

Europe

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

Email: antibody_sales_us@bio-rad.com

Fax: +44 (0)1865 852 739

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 'M375636:210104'

Printed on 08 Mar 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint