

# Datasheet: MCA609PB BATCH NUMBER 155044

Description:	RAT ANTI MOUSE CD8 ALPHA:Pacific Blue®		
Specificity:	CD8 ALPHA		
Other names:	LY-2		
Format:	Pacific Blue®		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	KT15		
Isotype:	IgG2a		
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			1/5 - 1/10

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.

Product Form	Purified IgG conjugate	ed to Pacific Blue® - li	quid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	Pacific Blue®	410	455
Preparation	D		
Тераганоп	supernatant	by affinity chromatog	raphy on Protein G
Buffer Solution	<b>.</b>		raphy on Protein G
•	supernatant		raphy on Protein G
Buffer Solution	supernatant  Phosphate buffered sa	aline	raphy on Protein G

# Concentrations

Immunogen	T cell clone, C6
External Database Links	UniProt:
	P01731 Related reagents
	Entrez Gene:
	12525 Cd8a Related reagents
Synonyms	Lyt2, Lyt-2
RRID	AB_566915
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 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 <sup>6</sup> 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	<ol> <li>Tomonari, K. &amp; Lovering, E. (1988) T-cell receptor-specific monoclonal antibodies against a V beta 11-positive mouse T-cell clone. <a href="Immunogenetics.">Immunogenetics.</a> 28 (6): 445-51.</li> <li>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. <a href="J">J</a></li> <li>Histochem Cytochem. 43 (3): 313-20.</li> <li>Lee, Y.L. et al (2003) Oral administration of Agaricus blazei (H1 strain) inhibited tumor growth in a sarcoma 180 inoculation model. <a href="Exp Anim.">Exp Anim.</a> 52: 371-5.</li> <li>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. <a href="J Immunol.">J Immunol.</a> 186: 83-91.</li> <li>Grimm, M. et al. (2010) Evaluation of immunological escape mechanisms in a mouse model of colorectal liver metastases. <a href="BMC Cancer.">BMC Cancer.</a> 10: 82.</li> <li>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 <a href="PLoS One.">PLoS One.</a> 4: e7965.</li> <li>Moos, M.P. et al. (2005) The lamina adventitia is the major site of immune cell accumulation in standard chow-fed applipoprotein E-deficient mice. </li></ol>

#### Vasc Biol. 25: 2386-91.

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- 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

### Acknowledgements

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## **Health And Safety** Information

Material Safety Datasheet documentation #10041 available at:

https://www.bio-rad-antibodies.com/SDS/MCA609PB

10041

Regulatory

For research purposes only

## Related Products

#### **Recommended Negative Controls**

RAT IgG2a NEGATIVE CONTROL:Pacific Blue® (MCA1212PB)

### **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A) MOUSE SEROBLOCK FcR (BUF041B)

America

North & South Tel: +1 800 265 7376 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 'M375948:210114'

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