

Datasheet: MCA609P750

## **BATCH NUMBER 151894**

Description:	RAT ANTI MOUSE CD8 ALPHA:RPE-Alexa Fluor® 750		
Specificity:	CD8 ALPHA		
Other names:	LY-2		
Format:	RPE-ALEXA FLUOR® 750		
Product Type:	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	-			Neat - 1/5

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	Purified IgG conjugated to R. Phycoerythrin (RPE) - Alexa Flu				
Reconstitution	Reconstitute with 1.0	ml distilled water				
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm			
	RPE-Alexa Fluor®750 488nm laser	496	779			
	RPE-Alexa Fluor®750 561nm laser	546	779			
Preparation	Purified IgG prepared supernatant.	by affinity chromatog	raphy on Protein G			
Buffer Solution	Phosphate buffered s	aline				

Preservative
Stabilisers
Immunogen

0.09% Sodium Azide

1% Bovine Serum Albumin

5% Sucrose

T cell clone, C6

# **External Database**

Links

**UniProt:** 

P01731 Related reagents

**Entrez Gene:** 

12525 Cd8a Related reagents

**Synonyms** 

Lyt2, Lyt-2

**RRID** 

AB 616882

**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 in vitro 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 (BUF041A/B/C).

#### References

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- 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>
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- 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. <u>Arterioscler Thromb</u> 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:</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.</u> 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. <u>Proc Natl</u> 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 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. <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. <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.</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. <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>
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Storage 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

**Acknowledgements** 

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**Health And Safety** Information

Material Safety Datasheet documentation #20487 available at:

https://www.bio-rad-antibodies.com/SDS/MCA609P750

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Regulatory

For research purposes only

# Related Products

#### **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 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 'M375638:210104'

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