

Datasheet: MCA1108G

BATCH NUMBER 164870

Description:	RAT ANTI MOUSE CD8
Specificity:	CD8 ALPHA
Other names:	LY-2
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YTS105.18
Isotype:	IgG2a
Quantity:	0.25 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
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% sodium azide (NaN ₃)

Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1 mg/ml

Immunogen Mouse spleen cells.

External Database Links

UniProt:

[P01731](#)

[Related reagents](#)

Entrez Gene:

[12525](#)

Cd8a

[Related reagents](#)

Synonyms Lyt2, Lyt-2

RRID AB_322819

Fusion Partners Spleen cells from an immunized DA rat were fused with cells of the rat Y3/Ag1.2.3. myeloma cell line.

Specificity **Rat anti Mouse CD8, clone YTS105.18** recognizes a non polymorphic epitope on the mouse CD8 alpha chain. This antibody has been reported to block MHC I dependent T cell responses *in vitro* and *in vivo*, and induces transplantation tolerance in combination with CD4 antibodies ([Cobbold et al. 1990](#) & [Wise et al. 1998](#)).

Flow Cytometry Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl

References

1. Cobbold, S.P. *et al.* (1990) The induction of skin graft tolerance in major histocompatibility complex-mismatched or primed recipients: primed T cells can be tolerized in the periphery with anti-CD4 and anti-CD8 antibodies. [Eur J Immunol. 20 \(12\): 2747-55.](#)
2. Qin, S.X. *et al.* (1990) Induction of tolerance in peripheral T cells with monoclonal antibodies. [Eur J Immunol. 20 \(12\): 2737-45.](#)
3. Wise, M.P. *et al.* (1998) Linked suppression of skin graft rejection can operate through indirect recognition. [J Immunol. 161 \(11\): 5813-6.](#)
4. Sroga, J.M. *et al.* (2003) Rats and mice exhibit distinct inflammatory reactions after spinal cord injury. [J Comp Neurol. 462: 223-40.](#)
5. Himoudi, N. *et al.* (2007) Development of anti-PAX3 immune responses; a target for cancer immunotherapy [Cancer Immunol Immunother. 56: 1381-95.](#)
6. Lacroix-Lamande, S. *et al.* (2009) Neonate intestinal immune response to CpG oligodeoxynucleotide stimulation. [PLoS One. 4: 1-8.](#)
7. Karlsson, M.R. *et al.* (2010) Hypersensitivity and oral tolerance in the absence of a secretory immune system. [Allergy. 65: 561-70.](#)
8. Nakashima, H. *et al.* (2011) A Novel Combination Immunotherapy for Cancer by IL-13Rα2-Targeted DNA Vaccine and Immunotoxin in Murine Tumor Models. [J Immunol. 187: 4935-46.](#)

9. Bassi, M.R. *et al.* (2015) CD8+ T cells complement antibodies in protecting against yellow fever virus. [J Immunol. 194 \(3\): 1141-53.](#)
10. Shaw, T.N. *et al.* (2015) Perivascular Arrest of CD8+ T Cells Is a Signature of Experimental Cerebral Malaria. [PLoS Pathog. 11 \(11\): e1005210.](#)
11. Jalili, R.B. *et al.* (2018) Fibroblast cell-based therapy prevents induction of alopecia areata in an experimental model. [Cell Transplant. 27 \(6\): 994-1004.](#)
12. Zhao, Q. *et al.* (2019) Tumor-targeted IL-12 combined with tumor resection yields a survival-favorable immune profile. [J Immunother Cancer. 7 \(1\): 154.](#)
13. Mohanta, S.K. *et al.* (2022) Neuroimmune cardiovascular interfaces control atherosclerosis. [Nature. 605 \(7908\): 152-9.](#)

Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1108G10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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