

Datasheet: MCA1768F

Description:	RAT ANTI MOUSE CD8:FITC
Specificity:	CD8
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	YTS169.4
Isotype:	IgG2b
Quantity:	0.1 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	▪			Neat - 1/2

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
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	1% bovine serum albumin						
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml						

**External Database
Links**

UniProt:

[P01731](#) [Related reagents](#)
[P10300](#) [Related reagents](#)

Entrez Gene:

[12525](#) Cd8a [Related reagents](#)
[12526](#) Cd8b1 [Related reagents](#)

Synonyms

Cd8b1, Ly-3, Lyt2, Lyt-2, Lyt3, Lyt-3

Specificity

Rat anti Mouse CD8 antibody, clone YTS169.4 recognizes the murine CD8 cell surface antigen, expressed by a subset of T lymphocytes.

Rat anti Mouse CD8 antibody, clone YTS169.4 exhibits depleting activity when used *in vivo*.

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.
The Fc region of monoclonal antibodies may bind to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/BUF041B](#)).

References

1. Cobbold, S.P. *et al.* (1984) Therapy with monoclonal antibodies by elimination of T-cell subsets *in vivo*. [Nature. 312 \(5994\): 548-51.](#)
2. 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.](#)
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. Bemelman, F. *et al.* (1998) Bone marrow transplantation induces either clonal deletion or infectious tolerance depending on the dose. [J Immunol. 160 \(6\): 2645-8.](#)
5. Higgins, L.M. *et al.* (1999) Regulation of T cell activation in vitro and in vivo by targeting the OX40-OX40 ligand interaction: amelioration of ongoing inflammatory bowel disease with an OX40-IgG fusion protein, but not with an OX40 ligand-IgG fusion protein. [J Immunol. 162 \(1\): 486-93.](#)
6. Jaffar, Z. *et al.* (2002) A key role for prostaglandin I2 in limiting lung mucosal Th2, but not Th1, responses to inhaled allergen. [J Immunol. 169 \(10\): 5997-6004.](#)
7. Scotland, R.S. *et al.* (2011) Sex-differences in resident immune cell phenotype underlies more efficient acute inflammatory responses in female mice. [Blood. 118: 5918-27.](#)
8. Zirger, J.M. *et al.* (2012) Immune-mediated loss of transgene expression from virally transduced brain cells is irreversible, mediated by IFNγ, perforin, and TNFα, and due to the elimination of transduced cells. [Mol Ther. 20 \(4\): 808-19.](#)
9. Abd-elhakim, Y.M. *et al.* (2016) Hemato-immunologic impact of subchronic exposure to melamine and/or formaldehyde in mice. [J Immunotoxicol. 13 \(5\): 713-22.](#)
10. Matsubara, K. *et al.* (2016) Immune activation during the implantation phase causes preeclampsia-like symptoms via the CD40-CD40 ligand pathway in pregnant mice. [Hypertens Res. 39 \(6\): 407-14.](#)

11. de Souza, T.A. *et al.* (2018) Relationship between the inflammatory tumor microenvironment and different histologic types of canine mammary tumors. [Res Vet Sci. 119: 209-14.](#)
12. Nelvagal, H.R. *et al.* (2020) Comparative proteomic profiling reveals mechanisms for early spinal cord vulnerability in CLN1 disease. [Sci Rep. 10 \(1\): 15157.](#)
13. Lejeune, P. *et al.* (2021) Immunostimulatory effects of targeted thorium-227 conjugates as single agent and in combination with anti-PD-L1 therapy. [J Immunother Cancer. \(10\):e002387.](#)
14. Nelke, C. *et al.* (2023) K(2P)2.1 is a regulator of inflammatory cell responses in idiopathic inflammatory myopathies. [J Autoimmun. 142: 103136.](#)

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. This product is photosensitive and should be protected from light.

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/MCA1768F10041>

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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

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)

'M411434:221103'

Printed on 23 Nov 2023