

Datasheet: MCA1767GA

Description:	RAT ANTI MOUSE CD4
Specificity:	CD4
Other names:	L3T4 ANTIGEN, LY-4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YTS191.1
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	■			1/50 - 1/200
Immunohistology - Frozen (1)	■			
Immunohistology - Paraffin		■		
ELISA			■	
Immunoprecipitation			■	
Western Blotting			■	

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

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 Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1 mg/ml

**External Database
Links**

UniProt:

[P06332](#) [Related reagents](#)

Entrez Gene:

[12504](#) Cd4 [Related reagents](#)

Specificity

Rat anti Mouse CD4 antibody, clone YTS191.1 recognizes the murine CD4 cell surface antigen, expressed by a subset of T lymphocytes.

Rat anti Mouse CD4 antibody, clone YTS191.1 exhibits depleting activity when used *in vivo* ([Bemelman *et al.* 1998](#)).

Flow Cytometry

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

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. 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.](#)
3. 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.](#)
4. Croxford, J.L. *et al.* (2001) Different therapeutic outcomes in experimental allergic encephalomyelitis dependent upon the mode of delivery of IL-10: a comparison of the effects of protein, adenoviral or retroviral IL-10 delivery into the central nervous system. [J Immunol. 166: 4124-30.](#)
5. 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. [J Immunol. 186: 83-91.](#)
6. Gaupp, S. *et al.* (2008) Amelioration of experimental autoimmune encephalomyelitis in IL-4Ralpha-/- mice implicates compensatory up-regulation of Th2-type cytokines. [Am J Pathol. 173: 119-29.](#)
7. Grimm, M.*et al.* (2010) Evaluation of immunological escape mechanisms in a mouse model of colorectal liver metastases. [BMC Cancer. 10: 82.](#)
8. Jégou, J.F. *et al.* (2007) C3d Binding to the Myelin Oligodendrocyte Glycoprotein Results in an Exacerbated Experimental Autoimmune Encephalomyelitis [J Immunol. 178: 3323-31.](#)
9. Huber, J.M. *et al.* (2009) The proteasome inhibitor bortezomib aggravates renal ischemia-reperfusion injury. [Am J Physiol Renal Physiol. 297: F451-60.](#)
10. Wolf, D. *et al.* (2005) CD4+CD25+ regulatory T cells inhibit experimental anti-glomerular basement membrane glomerulonephritis in mice. [J Am Soc Nephrol. 16: 1360-70.](#)
11. Abdulreda, M.H. *et al.* (2011) High-resolution, noninvasive longitudinal live imaging of immune responses. [Proc Natl Acad Sci U S A. 108: 12863-8.](#)
12. 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.](#)
13. 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.](#)
14. Zitt, E. *et al.* (2011) The selective mineralocorticoid receptor antagonist eplerenone is protective in mild anti-GBM glomerulonephritis. [Int J Clin Exp Pathol. 4:606-15.](#)

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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

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

'M319060:180719'

Printed on 01 Aug 2018