Datasheet: MCA1767GA

BATCH NUMBER 149352

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
RRID	AB_323559
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 10^6 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 glomeru-lonephritis. Int J Clin Exp Pathol. 4:606-15.
15. Nelvagal, H.R. *et al.* (2020) Comparative proteomic profiling reveals mechanisms for early spinal cord vulnerability in CLN1 disease. Sci Rep. 10 (1): 15157.
16. Groh, J. *et al.* (2021) Immune modulation attenuates infantile neuronal ceroid lipofuscinosis in mice before and after disease onset Brain Communications. fcab047.

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.
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/MCA1767GA 10040
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

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

'M365694:200529'

Printed on 10 Apr 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint