

Datasheet: MCA1767T

BATCH NUMBER 1808

Description: RAT ANTI MOUSE CD	
Specificity:	CD4
Other names:	L3T4 ANTIGEN, LY-4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YTS191.1
Isotype:	lgG2b
Quantity:	25 μg

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 (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 1.0 mg/ml
External Database Links	UniProt: P06332 Related reagents Entrez Gene: 12504 Cd4 Related reagents
RRID	AB_1101991
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 <i>in vivo</i> (Bemelman <i>et al.</i> 1998).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Cobbold, S.P. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (2010) Evaluation of immunological escape mechanisms in a mouse model of colorectal liver metastases. BMC Cancer. 10: 82. 8. Jégou, J.F. <i>et al.</i> (2007) C3d Binding to the Myelin Oligodendrocyte Glycoprotein

Results in an Exacerbated Experimental Autoimmune Encephalomyelitis <u>J Immunol. 178:</u> 3323-31.

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- 10. 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.
- 11. Abdulreda, M.H. *et al.* (2011) High-resolution, noninvasive longitudinal live imaging of immune responses. <u>Proc Natl Acad Sci U S A. 108: 12863-8.</u>
- 12. Nakashima, H. *et al.* (2011) A Novel Combination Immunotherapy for Cancer by IL-13Rα2-Targeted DNA Vaccine and Immunotoxin in Murine Tumor Models. <u>J Immunol.</u> 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. <u>Blood. 118:</u> 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. <u>Sci Rep. 10 (1): 15157.</u>
- 16. Groh, J. *et al.* (2021) Immune modulation attenuates infantile neuronal ceroid lipofuscinosis in mice before and after disease onset <u>Brain Communications</u>. 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/MCA1767T 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...) FITC

Goat Anti Rat IgG (STAR73...) RPE

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) DyLight®550, DyLight®650, DyLight®800

Rabbit Anti Rat IgG (STAR21...) HRP

Rabbit Anti Rat IgG (STAR16...) <u>DyLight®800</u>
Goat Anti Rat IgG (STAR131...) <u>Alk. Phos., Biotin</u>

Rabbit Anti Rat IgG (STAR17...) Goat Anti Rat IgG (STAR72...) FITC HRP

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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 'M365695:200529'

Printed on 12 Aug 2023

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