

# Datasheet: MCA500SBV670 BATCH NUMBER 100004960

Description:	RAT ANTI MOUSE CD3:StarBright Violet 670
Specificity:	CD3
Format:	StarBright Violet 670
Product Type:	Monoclonal Antibody
Clone:	КТЗ
Isotype:	lgG2a
Quantity:	100 TESTS/0.5ml

## **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 genera	al protocol reco	ommen	dations, please visit <u>v</u>	www.bio-		
	rad-antibodies.com/protocols.						
		Yes	No	Not Determined	Suggested Dilution		
	Flow Cytometry	•			Neat		
	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 give 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 StarBright Violet 670 - liquid						
Max Ex/Em	Fluorophore	Excitation Max	k (nm)	Emission Max (nm)			
	StarBright Violet 670	400		667			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide (I	NaN <sub>3</sub> )					
Stabilisers	1% Bovine Serum Albumin						
	0.1% Pluronic F68						
	0.1% PEG 3350						
	0.05% Tween 20						

Immunogen	CBAT6 thymocytes
External Database Links	UniProt:
	P22646 Related reagents
	P24161     Related reagents       P11942     Related reagents
	P29020 Related reagents
	P04235 Related reagents
	Entrez Gene:
	12501 Cd3e Related reagents
	12503 Cd247 Related reagents
	12500 Cd3d Related reagents
	12502 Cd3g Related reagents
	12503 Cd247 Related reagents
Synonyms	Cd3z, T3d, Tcrz
Fusion Partners	Spleen cells from immunized SD rats were fused with cells of the NS0 mouse myeloma cell line.
Specificity	Rat anti Mouse CD3 antibody, clone KT3 recognizes the mouse CD3 antigen, expressed by mature T cells. Rat anti Mouse CD3 antibody, clone KT3 may be used to trigger proliferation and cytotoxicity of CD3 positive cells ( <u>Tomonari 1988</u> ). NB. For optimal staining incubations should be performed at room temperature.
Flow Cytometry	Use 5ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	<ol> <li>Tomonari, K. (1988) A rat antibody against a structure functionally related to the mouse T-cell receptor/T3 complex. Immunogenetics. 28 (6): 455-8.</li> <li>Lacroix-Lamandé, S. <i>et al.</i> (2002) Role of gamma interferon in chemokine expression in the ileum of mice and in a murine intestinal epithelial cell line after <i>Cryptosporidium</i> <i>parvum</i> infection. Infect Immun. 70 (4): 2090-9.</li> <li>Tomonari, K. &amp; Lovering, E. (1988) T-cell receptor-specific monoclonal antibodies against a V beta 11-positive mouse T-cell clone. Immunogenetics. 28 (6): 445-51.</li> <li>Haroon, F. <i>et al.</i>, (2011) Gp130-dependent astrocytic survival is critical for the control of autoimmune central nervous system inflammation. J Immunol. 186: 6521-31.</li> <li>Kumar, L. <i>et al.</i> (2002) Differential role of SLP-76 domains in T cell development and function. Proc Natl Acad Sci U S A. 99: 884-9.</li> <li>Hirsh, M. <i>et al.</i> (2004) Response of lung gammadelta T cells to experimental sepsis in mice. Immunology. 112: 153-60.</li> <li>Tarlton, J.F. <i>et al.</i> (2000) The role of up-regulated serine proteases and matrix metalloproteinases in the pathogenesis of a murine model of colitis. Am J Pathol. 157: 1927-35.</li> </ol>

8. Lazarovits, A.I. *et al.* (1999) Mechanisms of induction of renal allograft tolerance in CD45RB-treated mice. <u>Kidney Int. 55: 1303-10.</u>

9. Bauer, D. *et al.* (2009) Amniotic membrane transplantation induces apoptosis in T lymphocytes in murine corneas with experimental herpetic stromal keratitis <u>Invest</u> <u>Ophthalmol Vis Sci. 50: 3188-98.</u>

Heitmann, S. *et al.* (1999) Immunohistological characterization of leukocytes in the lungs of healthy mice and after bacterial intratracheal infection. <u>Lab Anim. 33: 288-94.</u>
 Hare, K.J. *et al.* (2003) Modeling TCR signaling complex formation in positive selection. <u>J Immunol. 171: 2825-31.</u>

Erlandsson, L. *et al.* (2004) Impaired B-1 and B-2 B cell development and atypical splenic B cell structures in IL-7 receptor-deficient mice. <u>Eur J Immunol. 34</u>: 3595-603.
 Severinová, J. *et al.* (2005) Co-inoculation of *Borrelia afzelii* with tick salivary gland extract influences distribution of immunocompetent cells in the skin and lymph nodes of mice. Folia Microbiol (Praha). 50: 457-63.

14. Rothhammer, V. *et al.* (2011) Th17 lymphocytes traffic to the central nervous system independently of  $\alpha$ 4 integrin expression during EAE. J Exp Med. 208 (12): 2465-76.

15. Salem, M. *et al.* (2011) Interferon regulatory factor-7 modulates experimental autoimmune encephalomyelitis in mice. <u>J Neuroinflammation. 8: 181.</u>

16. Hoeksema, M.A. *et al.* (2014) Targeting macrophage Histone deacetylase 3 stabilizes atherosclerotic lesions. <u>EMBO Mol Med. pii: e201404170.</u>

17. Scheinert, R.B. *et al.* (2016) Therapeutic effects of stress-programmed lymphocytes transferred to chronically stressed mice. <u>Prog Neuropsychopharmacol Biol Psychiatry. Apr</u> 21. pii: S0278-5846(16)30056-2. [Epub ahead of print]

18. Schaut, R.G. *et al.* (2015) Bovine viral diarrhea virus type 2 *in vivo* infection modulates TLR4 responsiveness in differentiated myeloid cells which is associated with decreased MyD88 expression. <u>Virus Res. 208: 44-55.</u>

19. Janssen, E. *et al.* (2016) A DOCK8-WIP-WASp complex links T cell receptors to the actin cytoskeleton. <u>J Clin Invest. 126 (10): 3837-51.</u>

20. Teeling, J.L. *et al.* (2012) Intracerebral immune complex formation induces inflammation in the brain that depends on Fc receptor interaction. <u>Acta Neuropathol. 124</u> (4): 479-90.

21. Van Aelst, L.N. *et al.* (2016) RNA Profiling in Human and Murine Transplanted Hearts: Identification and Validation of Therapeutic Targets for Acute Cardiac and Renal Allograft Rejection. <u>Am J Transplant. 16 (1): 99-110.</u>

22. Kim, I. *et al.* (2016) Immunological characterization of de novo and recall alloantibody suppression by CTLA4Ig in a mouse model of allosensitization. <u>Transpl Immunol. 38:</u> 84-92.

23. Massa, M.G. *et al.* (2017) Testosterone Differentially Affects T Cells and Neurons in Murine and Human Models of Neuroinflammation and Neurodegeneration. <u>Am J Pathol.</u> <u>187 (7): 1613-22.</u>

24. Zamudio, F. *et al.* (2020) TDP-43 mediated blood-brain barrier permeability and leukocyte infiltration promote neurodegeneration in a low-grade systemic inflammation mouse model. <u>J Neuroinflammation. 17 (1): 283.</u>

25. Yun, M. *et al.* (2020) Enriched-Baicalein Attenuates Allergy in Cells and Mice <u>Ev-Based Comp Alt Med. 2020: 1-8.</u>

Storage Store at +4°C. DO NOT FREEZE.

	This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA500SBV670 20471
Regulatory	For research purposes only

### **Related Products**

### **Recommended Useful Reagents**

### MOUSE SEROBLOCK FcR (BUF041A) MOUSE SEROBLOCK FcR (BUF041B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		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 'M376247:210127'

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