

Datasheet: MCA500SBV515

BATCH NUMBER 100004323

Description:	RAT ANTI MOUSE CD3:StarBright Violet 515
Specificity:	CD3
Format:	StarBright Violet 515
Product Type:	Monoclonal Antibody
Clone:	KT3
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 general protocol recommendations, please visit 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 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.

Product Form	Purified IgG conjugate	ed to StarBright Violet	515 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	StarBright Violet 515	401	516
	D : (" 11 0		
•	supernatant Phosphate buffered s	by affinity chromatogi	raphy on Protein G
uffer Solution	supernatant	aline (NaN ₃)	raphy on Protein G
Preparation Buffer Solution Preservative Stabilisers	Phosphate buffered so	aline (NaN ₃)	raphy on Protein G

Immunogen	CBAT6 thymocytes				
External Database	Hat Dank				
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 ⁶ cells in 100ul. Best practices				
	suggest a 5 minutes centrifugation at 6,000g prior to sample application.				
References	1. Tomonari, K. (1988) A rat antibody against a structure functionally related to the mouse				
	T-cell receptor/T3 complex. Immunogenetics. 28 (6): 455-8.				
	2. Lacroix-Lamandé, S. et al. (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>				
	parvum infection. Infect Immun. 70 (4): 2090-9.				
	3. Tomonari, K. & Lovering, E. (1988) T-cell receptor-specific monoclonal antibodies				
	against a V beta 11-positive mouse T-cell clone. <u>Immunogenetics. 28 (6): 445-51.</u>				
	4. Haroon, F. <i>et al.</i> , (2011) Gp130-dependent astrocytic survival is critical for the control of				
	autoimmune central nervous system inflammation. <u>J Immunol. 186: 6521-31.</u> 5. 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.				
	6. Hirsh, M. <i>et al.</i> (2004) Response of lung gammadelta T cells to experimental sepsis in				
	o. Tilisti, W. et al. (2004) Response of lung gammadella. I cells to experimental sepsis in				

metalloproteinases in the pathogenesis of a murine model of colitis. <u>Am J Pathol. 157:</u> 1927-35.

7. Tarlton, J.F. et al. (2000) The role of up-regulated serine proteases and matrix

mice. Immunology. 112: 153-60.

- 8. Lazarovits, A.I. *et al.* (1999) Mechanisms of induction of renal allograft tolerance in CD45RB-treated mice. Kidney Int. 55: 1303-10.
- 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> Ophthalmol Vis Sci. 50: 3188-98.
- 10. 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>
- 11. Hare, K.J. *et al.* (2003) Modeling TCR signaling complex formation in positive selection. <u>J Immunol. 171: 2825-31.</u>
- 12. 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.</u> 34: 3595-603.
- 13. 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 α4 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</u>. 8: 181.
- 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> 187 (7): 1613-22.
- 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. J Neuroinflammation. 17 (1): 283.
- 25. Yun, M. *et al.* (2020) Enriched-Baicalein Attenuates Allergy in Cells and Mice Ev-Based Comp Alt Med.. 2020: 1-8.

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 #20438 available at: https://www.bio-rad-antibodies.com/SDS/MCA500SBV515 20438
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

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe Tel:

Tel: +49 (0) 89 8090 95 21 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 'M373248:200901'

Printed on 08 Apr 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint