Datasheet: MCA500SBUV795

BATCH NUMBER 100006150

Description:	RAT ANTI MOUSE CD3:StarBright UltraViolet 795
Specificity:	CD3
Format:	StarBright UltraViolet 795
Product Type:	Monoclonal Antibody
Clone:	KT3
Isotype:	IgG2a
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.

Target Species

Mouse

Product Form

Purified IgG conjugated to StarBright UltraViolet 795 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright UltraViolet 795	340	792

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 (NaN_3)
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 (Tomonari 1988). 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. Lazarovits, A.I. *et al.* (1999) Mechanisms of induction of renal allograft tolerance in CD45RB-treated mice. Kidney Int. 55: 1303-10. 3. Heitmann, S. *et al.* (1999) Immunohistological characterization of leukocytes in the lungs of healthy mice and after bacterial intratracheal infection. Lab Anim. 33: 288-94. 4. Tarlton, J.F. *et al.* (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. 5. 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 *Cryptosporidium parvum* infection. Infect Immun. 70 (4): 2090-9. 6. Kumar, L. *et al.* (2002) Differential role of SLP-76 domains in T cell development and function. Proc Natl Acad Sci U S A. 99: 884-9.

7. Hare, K.J. *et al.* (2003) Modeling TCR signaling complex formation in positive selection. J Immunol. 171: 2825-31.
8. 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. Eur J Immunol. 34: 3595-603.
9. Hirsh, M. *et al.* (2004) Response of lung gammadelta T cells to experimental sepsis in mice. Immunology. 112: 153-60.
10. 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.
11. Bauer, D. *et al.* (2009) Amniotic membrane transplantation induces apoptosis in T lymphocytes in murine corneas with experimental herpetic stromal keratitis Invest Ophthalmol Vis Sci. 50: 3188-98.
12. Haroon, F. *et al.,* (2011) Gp130-dependent astrocytic survival is critical for the control of autoimmune central nervous system inflammation. J Immunol. 186: 6521-31.
13. 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.
14. Salem, M. *et al.* (2011) Interferon regulatory factor-7 modulates experimental autoimmune encephalomyelitis in mice. J Neuroinflammation. 8: 181.
15. Teeling, J.L. *et al.* (2012) Intracerebral immune complex formation induces inflammation in the brain that depends on Fc receptor interaction. Acta Neuropathol. 124 (4): 479-90.
16. Hoeksema, M.A. *et al.* (2014) Targeting macrophage Histone deacetylase 3 stabilizes atherosclerotic lesions. EMBO Mol Med. pii: e201404170.
17. Scheinert, R.B. *et al.* (2016) Therapeutic effects of stress-programmed lymphocytes transferred to chronically stressed mice. Prog Neuropsychopharmacol Biol Psychiatry. 70: 1-7.
18. Janssen, E. *et al.* (2016) A DOCK8-WIP-WASp complex links T cell receptors to the actin cytoskeleton. J Clin Invest. 126 (10): 3837-51.
19. 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. Am J Transplant. 16 (1): 99-110.
20. Kim, I. *et al.* (2016) Immunological characterization of de novo and recall alloantibody suppression by CTLA4Ig in a mouse model of allosensitization. Transpl Immunol. 38: 84-92.
21. Massa, M.G. *et al.* (2017) Testosterone Differentially Affects T Cells and Neurons in Murine and Human Models of Neuroinflammation and Neurodegeneration. Am J Pathol. 187 (7): 1613-22.
22. Granadillo, M. *et al.* (2019) Impact on antitumor response using a new adjuvant preparation as a component of a human papillomavirus type 16 therapeutic vaccine candidate. Vaccine. 37 (30): 3957-60.
23. Yun, M. *et al.* (2020) Enriched-Baicalein Attenuates Allergy in Cells and Mice Ev-Based Comp Alt Med.. 2020: 1-8.
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. Azulay, M. *et al.* (2023) Tumor-targeted superantigens produce curative tumor immunity with induction of memory and demonstrated antigen spreading. J Transl Med. 21

(1): 222.
26. Aloui, A. *et al.* (2023) AFM_1 Exposure in Male Balb/c Mice and Intervention Strategies Against Its Immuno-physiological toxicity using Clay Mineral and Lactic Acid Bacteria Alone or in Combination. Immunopharmacol Immunotoxicol. : 1-32.
27. Stein, S. *et al.* (2021) Deletion of fibroblast activation protein provides atheroprotection. Cardiovasc Res. 117 (4): 1060-9.
28. Jung, J. *et al.* (2018) Calnexin is necessary for T cell transmigration into the central nervous system. JCI Insight. 3 (5): e98410.
29. Griffiths, M.R. *et al.* (2018) CD93 regulates central nervous system inflammation in two mouse models of autoimmune encephalomyelitis. Immunology. 155 (3): 346-55.
30. von Rauchhaupt, E. *et al.* (2024) GDF-15 Suppresses Puromycin Aminonucleoside-Induced Podocyte Injury by Reducing Endoplasmic Reticulum Stress and Glomerular Inflammation Cells. 13 (7): 637.

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/MCA500SBUV795 20471
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

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

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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
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