

Datasheet: MCA2691SBV760

### **BATCH NUMBER 100006590**

Description:	RAT ANTI MOUSE CD4:StarBright Violet 760
Specificity:	CD4
Other names:	L3T4 ANTIGEN, LY-4
Format:	StarBright Violet 760
Product Type:	Monoclonal Antibody
Clone:	RM4-5
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 conjugat	Purified IgG conjugated to StarBright Violet 760 - liquid				
lax Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm			
	StarBright Violet 760	403	754			
eparation	Purified IgG prepared supernatant	Purified IgG prepared by affinity chromatography on Protein C supernatant				
er Solution	Phosphate buffered s	aline				
ervative	0.09% Sodium Azide	(NaN <sub>3</sub> )				
abilisers	1% Bovine Serum Alb	oumin				
	0.1% Pluronic F68					
	0.1% PEG 3350					

Immunogen	BALB/c mouse thymocytes					
External Database Links	UniProt: P06332 Related reagents  Entrez Gene:					
	12504 Cd4 Related reagents					
Specificity	Rat anti Mouse CD4 antibody, clone RM4-5 detects mouse CD4, a 55 kDa protein also known as Ly-4 and L3T4. CD4 is a single chain transmembraneous glycoprotein which belongs to the immunoglobulin superfamily, and is primarily expressed on peripheral blood monocytes and tissue macrophages. CD4 is also expressed on a subpopulation of regulatory T cells (CD4+CD25+), which play a key role in the maintenance of self tolerance.					
	Rat anti Mouse CD4 antibody, clone RM4-5 can be used for <i>in vitro</i> blocking of ligand binding, as well as <i>in vitro</i> CD4+ T cell depletions.					
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	1. von Kutzleben, S. <i>et al.</i> (2017) Depletion of CD52-positive cells inhibits the development of central nervous system autoimmune disease, but deletes an immune-tolerance promoting CD8 T-cell population. Implications for secondary autoimmunity of alemtuzumab in multiple sclerosis. Immunology. 150 (4): 444-55.  2. Zamudio, F. <i>et al.</i> (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.  3. Aloui, A. <i>et al.</i> (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.  4. Camponeschi, C. <i>et al.</i> (2021) S100B Protein as a Therapeutic Target in Multiple Sclerosis: The S100B Inhibitor Arundic Acid Protects from Chronic Experimental Autoimmune Encephalomyelitis. Int J Mol Sci. 22 (24): 13558.					
Further Reading	1. Fehérvari, Z. & Sakaguchi, S. (2004) CD4+ Tregs and immune control. <u>J Clin Invest.</u> 114 (9): 1209-17.					
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** Material Safety Datasheet documentation #20471 available at:

**Information** https://www.bio-rad-antibodies.com/SDS/MCA2691SBV760

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**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

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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 'M395320:220425'

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