

Datasheet: MCA1439SBUV445

Description:	RAT ANTI MOUSE CD19:StarBright UltraViolet 445
Specificity:	CD19
Format:	StarBright UltraViolet 445
Product Type:	Monoclonal Antibody
Clone:	6D5
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 <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	ed to StarBright UltraV	riolet 445 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	StarBright UltraViolet 445	347	440
Preparation	Purified IgG prepared	l by affinity chromatog	raphy on Protein G
	supernatant	. Sy animity of normatogi	aprily on Frotonia
Buffer Solution	•		тарпу спт токош с
	supernatant	aline	парту стт токолт с
Preservative	supernatant  Phosphate buffered s	aline (NaN <sub>3</sub> )	
Preservative	Phosphate buffered s	aline (NaN <sub>3</sub> )	
Buffer Solution  Preservative Stabilisers	Phosphate buffered s 0.09% sodium azide 1% bovine serum alb	aline (NaN <sub>3</sub> )	

# Approx. Protein Concentrations

For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.

#### **Immunogen**

Human K562 cell line transfected with murine CD19.

## External Database Links

#### **UniProt:**

P25918 Related reagents

#### **Entrez Gene:**

12478 Cd19 Related reagents

#### **Fusion Partners**

Spleen cells from immunised rats were fused with cells of the P3X63.Ag8.653 myeloma cell line.

#### **Specificity**

Rat anti Mouse CD19 antibody, clone 6D5 recognizes the murine CD19 cell surface antigen, a ~95 kDa glycoprotein expressed by B lymphocytes. Rat anti Mouse CD19 antibody, clone 6D5 recognizes the same, or a closely related epitope as clone Rat anti Mouse CD19 antibody, clone ID3 in cross-competition assays.

StarBright Violet 670 conjugated Rat anti Mouse CD19 antibody, clone 6D5 (MCA1439SBV670) has been used successfully to label cells in an organ-on-chip platform by immunofluorescence (Cook *et al.* 2024 [preprint]).

#### Flow Cytometry

Use 5µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

#### References

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- 3. Bermudez-Fajardo, A. *et al.* (2011) The effect of *Chlamydophila pneumoniae* Major Outer Membrane Protein (MOMP) on macrophage and T cell-mediated immune responses. Immunobiology. 216: 152-63.
- 4. De Jesus, M. *et al.* (2009) Galactoxylomannan-mediated immunological paralysis results from specific B cell depletion in the context of widespread immune system damage. <u>J Immunol. 183: 3885-94.</u>
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- 6. Starck, J. *et al.* (2010) Inducible Fli-1 gene deletion in adult mice modifies several myeloid lineage commitment decisions and accelerates proliferation arrest and terminal erythrocytic differentiation. <u>Blood. 116: 4795-805.</u>
- 7. Scotland, R.S. *et al.* (2011) Sex differences in resident immune cell phenotype underlie more efficient acute inflammatory responses in female mice. <u>Blood. 118 (22): 5918-27.</u>
- 8. White, H.N. and Meng, Q.H. (2012) Recruitment of a Distinct but Related Set of VH Sequences into the Murine CD21hi/CD23- Marginal Zone B Cell Repertoire to That Seen

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- 12. Weiss-Gayet, M. *et al.* (2016) Notch Stimulates Both Self-Renewal and Lineage Plasticity in a Subset of Murine CD9High Committed Megakaryocytic Progenitors. <u>PLoS One. 11 (4): e0153860.</u>
- 13. Meng, Q.H. & White, H.N. (2017) CD21<sup>int</sup> CD23<sup>+</sup> follicular B cells express antigen-specific secretory IgM mRNA as primary and memory responses. <u>Immunology. 151 (2):</u> 211-8.
- 14. Mccubbrey, A.L. *et al.* (2016) MicroRNA-34a Negatively Regulates Efferocytosis by Tissue Macrophages in Part via SIRT1. <u>J Immunol. 196 (3): 1366-75.</u>
- 15. Vila-Caballer, M. *et al.* (2019) Disruption of the CCL1-CCR8 axis inhibits vascular Treg recruitment and function and promotes atherosclerosis in mice. <u>J Mol Cell Cardiol. 132:</u> 154-63.
- 16. Domingues, C.S. *et al.* (2020) Host Genetics Background Influence in the Intragastric *Trypanosoma cruzi* Infection. <u>Front Immunol. 11: 566476.</u>
- 17. Cook, S.R. *et al.* (2024) A 3D-printed multi-compartment organ-on-chip platform with a tubing-free pump models communication with the lymph node. <u>bioRxiv. Aug 04 [Epub ahead of print]</u>.
- 18. Lepland, A. *et al.* (2024) Therapeutic Tumor Macrophage Reprogramming in Breast Cancer Through a Peptide-Drug Conjugate <u>bioRxiv 12 Aug [Epub ahead of print].</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: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1439SBUV445">https://www.bio-rad-antibodies.com/SDS/MCA1439SBUV445</a> 20471
Regulatory	For research purposes only

# Related Products

### **Recommended Useful Reagents**

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

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То

batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M434981:250224'

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