

## Datasheet: MCA1439SBUV445

**BATCH NUMBER 64675688**

<b>Description:</b>	RAT ANTI MOUSE CD19:StarBright UltraViolet 445
<b>Specificity:</b>	CD19
<b>Format:</b>	StarBright UltraViolet 445
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	6D5
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Mouse		
<b>Product Form</b>	Purified IgG conjugated to StarBright UltraViolet 445 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	StarBright UltraViolet 445	347	440
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% bovine serum albumin		
	0.1% Pluronic F68		
	0.1% PEG 3350		

0.05% Tween 20

---

<b>Approx. Protein Concentrations</b>	For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page.
---------------------------------------	---

---

<b>Immunogen</b>	Human K562 cell line transfected with murine CD19.
------------------	--

---

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P25918</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">12478</a> Cd19 <a href="#">Related reagents</a>
--------------------------------	--

---

<b>Fusion Partners</b>	Spleen cells from immunised rats were fused with cells of the P3X63.Ag8.653 myeloma cell line.
------------------------	--

---

<b>Specificity</b>	<p><b>Rat anti Mouse CD19 antibody, clone 6D5</b> 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.</p> <p>StarBright Violet 670 conjugated Rat anti Mouse CD19 antibody, clone 6D5 (<b>MCA1439SBV670</b>) has been used successfully to label cells in an organ-on-chip platform by immunofluorescence (<a href="#">Cook et al. 2024 [preprint]</a>).</p>
--------------------	--

---

<b>Flow Cytometry</b>	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.
-----------------------	---

---

<b>References</b>	<ol style="list-style-type: none"><li>1. Vernooy, J.H. <i>et al.</i> (2002) Long-term intratracheal lipopolysaccharide exposure in mice results in chronic lung inflammation and persistent pathology. <a href="#">Am J Respir Cell Mol Biol. 26 (1): 152-9.</a></li><li>2. Andrew, D. and Aspinall. R. (2001) Il-7 and not stem cell factor reverses both the increase in apoptosis and the decline in thymopoiesis seen in aged mice. <a href="#">J Immunol. 166: 1524-30.</a></li><li>3. Bermudez-Fajardo, A. <i>et al.</i> (2011) The effect of <i>Chlamydophila pneumoniae</i> Major Outer Membrane Protein (MOMP) on macrophage and T cell-mediated immune responses. <a href="#">Immunobiology. 216: 152-63.</a></li><li>4. De Jesus, M. <i>et al.</i> (2009) Galactoxylomannan-mediated immunological paralysis results from specific B cell depletion in the context of widespread immune system damage. <a href="#">J Immunol. 183: 3885-94.</a></li><li>5. Jégou, J.F. <i>et al.</i> (2007) C3d binding to the myelin oligodendrocyte glycoprotein results in an exacerbated experimental autoimmune encephalomyelitis. <a href="#">J Immunol. 178: 3323-31.</a></li><li>6. Starck, J. <i>et al.</i> (2010) Inducible Fli-1 gene deletion in adult mice modifies several myeloid lineage commitment decisions and accelerates proliferation arrest and terminal erythrocytic differentiation. <a href="#">Blood. 116: 4795-805.</a></li><li>7. Scotland, R.S. <i>et al.</i> (2011) Sex differences in resident immune cell phenotype underlie more efficient acute inflammatory responses in female mice. <a href="#">Blood. 118 (22): 5918-27.</a></li></ol>
-------------------	--

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 in the Class-Switched Antibody Response. [J Immunol. 188: 287-93.](#)
9. Reynaud, J.M. *et al.* (2014) Human herpesvirus 6A infection in CD46 transgenic mice: viral persistence in the brain and increased production of proinflammatory chemokines via Toll-like receptor 9. [J Virol. 88: 5421-36.](#)
10. Candolfi, M. *et al.* (2011) B cells are critical to T-cell-mediated antitumor immunity induced by a combined immune-stimulatory/conditionally cytotoxic therapy for glioblastoma. [Neoplasia. 13: 947-60.](#)
11. Takabayashi, H. *et al.* (2014) Anti-inflammatory activity of bone morphogenetic protein signaling pathways in stomachs of mice. [Gastroenterology. 147: 396-406.e7.](#)
12. Weiss-Gayet, M. *et al.* (2016) Notch Stimulates Both Self-Renewal and Lineage Plasticity in a Subset of Murine CD9High Committed Megakaryocytic Progenitors. [PLoS One. 11 \(4\): e0153860.](#)
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. [Immunology. 151 \(2\): 211-8.](#)
14. Mccubbrey, A.L. *et al.* (2016) MicroRNA-34a Negatively Regulates Efferocytosis by Tissue Macrophages in Part via SIRT1. [J Immunol. 196 \(3\): 1366-75.](#)
15. Vila-Caballer, M. *et al.* (2019) Disruption of the CCL1-CCR8 axis inhibits vascular Treg recruitment and function and promotes atherosclerosis in mice. [J Mol Cell Cardiol. 132: 154-63.](#)
16. Domingues, C.S. *et al.* (2020) Host Genetics Background Influence in the Intra-gastric *Trypanosoma cruzi* Infection. [Front Immunol. 11: 566476.](#)
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. [bioRxiv. Aug 04 \[Epub ahead of print\].](#)
18. Lepland, A. *et al.* (2024) Therapeutic Tumor Macrophage Reprogramming in Breast Cancer Through a Peptide-Drug Conjugate [bioRxiv 12 Aug \[Epub ahead of print\].](#)

<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
<b>Health And Safety Information</b>	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>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

**Product inquiries: [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)**

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M434981:250224'

**Printed on 28 May 2026**

---

© 2026 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)