

Datasheet: MCA1439SBR670

## **BATCH NUMBER 100007933**

Description:	RAT ANTI MOUSE CD19:StarBright Red 670
Specificity:	CD19
Format:	StarBright Red 670
Product Type:	Monoclonal Antibody
Clone:	6D5
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 conjugate	ed to StarBright Red 6	70 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	StarBright Red 670	653	666
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein G
Buffer Solution	Phosphate buffered sa	aline	
Preservative	0.09% Sodium Azide	(NaN <sub>3</sub> )	
Stabilisers	1% Bovine Serum Alb	oumin	
	0.1% Pluronic F68		
	0.1% PEG 3350		
	0.05% Tween 20		

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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  $5\mu$ l of the suggested working dilution to label  $10^6$  cells in  $100\mu$ l. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

#### References

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- 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. J Immunol. 183: 3885-94.
- 5. Jégou, J.F. *et al.* (2007) C3d binding to the myelin oligodendrocyte glycoprotein results in an exacerbated experimental autoimmune encephalomyelitis. <u>J Immunol. 178: 3323-31.</u>
- 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</u>: 4795-805.
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Toll-like receptor 9. J Virol. 88: 5421-36.

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- 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. <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. 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. <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 recounterparts	lated U.S. and foreign
Health And Safety Information	Material Safety Datasheet documentation #20471 available at <a href="https://www.bio-rad-antibodies.com/SDS/MCA1439SBR670">https://www.bio-rad-antibodies.com/SDS/MCA1439SBR670</a> 20471	:
Regulatory	For research purposes only	

## Related Products

#### Recommended Useful Reagents

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

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