

Datasheet: MCA1940SBV670

BATCH NUMBER 100004941

Description:	MOUSE ANTI HUMAN CD19:StarBright Violet 670
Specificity:	CD19
Format:	StarBright Violet 670
Product Type:	Monoclonal Antibody
Clone:	LT19
Isotype:	IgG1
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	Human		
Product Form	Purified IgG conjugated to StarBright Violet 670 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright Violet 670	400	667
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
	0.1% Pluronic F68		
	0.1% PEG 3350		
	0.05% Tween 20		

External Database
Links

UniProt:

[P15391](#) [Related reagents](#)

Entrez Gene:

[930](#) CD19 [Related reagents](#)

Specificity

Mouse anti Human CD19 antibody, clone LT19 recognizes human CD19 also known as T-cell surface antigen Leu-12 or B-lymphocyte surface antigen B4. CD19 is a ~95 kDa type I single pass transmembrane glycoprotein expressed on follicular dendritic cells and B-cells during maturation but is lost on development into plasma cells ([de Rie et al. 1989](#)).

CD19 is the broadest lineage specific marker for B cells and functions as a B-cell co-receptor in conjunction with CD21 ([Bradbury et al. 1992](#)), CD9, CD81 and CD82 ([Horváth et al. 1998](#)). CD19 is implicated in the down-regulation of B cell growth and proliferation ([Pezzutto et al. 1987](#)).

Flow Cytometry

Use 5ul of the suggested working dilution to label 10⁶ cells in 100ul. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

References

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4. Sengstake, S. *et al.* (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. [Int Immunol. 18 \(7\): 1171-8.](#)
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6. Franz, B. *et al.* (2011) *Ex vivo* characterization and isolation of rare memory B cells with antigen tetramers. [Blood. 118: 348-57.](#)
7. Lacal, P.M. *et al.* (2013) Glucocorticoid-induced tumor necrosis factor receptor family-related ligand triggering upregulates vascular cell adhesion molecule-1 and intercellular adhesion molecule-1 and promotes leukocyte adhesion. [J Pharmacol Exp Ther. 347: 164-72.](#)
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10. Hertzberg, L. *et al.* (2010) Down syndrome acute lymphoblastic leukemia, a highly heterogeneous disease in which aberrant expression of CRLF2 is associated with mutated JAK2: a report from the International BFM Study Group. [Blood. 115: 1006-17.](#)
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[Vasc Dis Res. 8: 221-8.](#)

12. Dorvignit, D. *et al.* (2012) Expression and biological characterization of an anti-CD20 biosimilar candidate antibody: a case study. [MAbs. 4 \(4\): 488-96.](#)

13. Karlsen, M. *et al.* (2015) TLR-7 and -9 Stimulation of Peripheral Blood B Cells Indicate Altered TLR Signalling in Primary Sjögren's Syndrome Patients by Increased Secretion of Cytokines. [Scand J Immunol. 82 \(6\): 523-31.](#)

14. Clark, L.E. *et al.* (2018) Vaccine-elicited receptor-binding site antibodies neutralize two New World hemorrhagic fever arenaviruses. [Nat Commun. 9 \(1\): 1884.](#)

15. Gu, Y. *et al.* (2019) Defining the structural basis for human alloantibody binding to human leukocyte antigen allele HLA-A*11:01. [Nat Commun. 10 \(1\): 893.](#)

16. Yang, C. *et al.* (2013) B cells promote tumor progression via STAT3 regulated-angiogenesis. [PLoS One. 8 \(5\): e64159.](#)

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/MCA1940SBV670 20471
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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](https://www.bio-rad-antibodies.com/datasheets)
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