

# Datasheet: MCA1940SBV515 BATCH NUMBER 64616988

Description:	MOUSE ANTI HUMAN CD19:StarBright Violet 515
Specificity:	CD19
Format:	StarBright Violet 515
Product Type:	Monoclonal Antibody
Clone:	LT19
Isotype:	lgG1
Quantity:	100 TESTS/0.5ml

## **Product Details**

Applications	This product has been reported to work in the following applications. This information 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 <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	-			Neat	
	Where this product has necessarily exclude its a guide only. It is recon system using appropria	use in such pr nmended that	ocedu the use	res. Suggested workin er titrates the product f	g dilutions are given as	
Target Species	Human					
Product Form	Purified IgG conjugated to StarBright Violet 515 - liquid					
Max Ex/Em	Fluorophore StarBright Violet 515	Excitation Max 402	(nm)	Emission Max (nm) 516		
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 <sub>3</sub> )					
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 <i>et al.</i> 1989). CD19 is the broadest lineage specific marker for B cells and functions as a B-cell co-receptor in conjunction with CD21 (Bradbury <i>et al.</i> 1992), CD9, CD81 and CD82 (Horváth <i>et al.</i> 1998). CD19 is implicated in the down-regulation of B cell growth and proliferation (Pezzutto <i>et al.</i> 1987).
	MCA1940SBV670 has been shown to recognize CD19 on mouse lymph node in live fluorescent IHC ( <u>Cook <i>et al.</i> 2024</u> ).
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	<ol> <li>Hughes, G.J. <i>et al.</i> (2007) Virus immunocapture provides evidence of CD8 lymphocyte- derived HIV-1 <i>in vivo</i>. AIDS. 21: 1507-13.</li> <li>Allen, J.S. <i>et al.</i> (2009) Plasmacytoid dendritic cells are proportionally expanded at diagnosis of type 1 diabetes and enhance islet autoantigen presentation to T-cells through immune complex capture. <u>Diabetes</u>. 58: 138-45.</li> <li>McIntosh, K. <i>et al.</i> (2006) The immunogenicity of human adipose-derived cells: temporal changes <i>in vitro</i>. <u>Stem Cells</u>. 24: 1246-53.</li> <li>Sengstake, S. <i>et al.</i> (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. Int Immunol. 18 (7): 1171-8.</li> <li>Villarroel Dorrego, M. <i>et al.</i> (2006) Transfection of CD40 in a human oral squamous cell carcinoma keratinocyte line upregulates immune potency and costimulatory molecules. <u>Br</u> <u>J Dermatol</u>. 154: 231-8.</li> <li>Franz, B. <i>et al.</i> (2011) <i>Ex vivo</i> characterization and isolation of rare memory B cells with antigen tetramers. <u>Blood</u>. 118: 348-57.</li> <li>Lacal, P.M. <i>et al.</i> (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. <u>J Pharmacol Exp Ther</u>. 347: <u>164-72.</u></li> <li>Franz, B. <i>et al.</i> (2011) Ex vivo characterization and isolation of rare memory B cells with antigen tetramers. <u>Blood</u>. 118: 348-57.</li> <li>Girbl, T. <i>et al.</i> (2013) CD40-mediated activation of chronic lymphocytic leukemia cells promotes their CD44-dependent adhesion to hyaluronan and restricts CCL21-induced motility. <u>Cancer Res</u>. 73: 561-70.</li> <li>Hertzberg, L. <i>et al.</i> (2010) Down syndrome acute lymphoblastic leukemia, a highly heterogeneous disease in which aberrant expression of CRLF2 is associated with mutated</li> </ol>

	JAK2: a report from the International BFM Study Group. Blood. 1	<u>15: 1006-17.</u>		
	11. Kakko, T. et al. (2011) Inflammatory effects of blood leukocyte	es: association with		
	vascular function in neuropeptide Y proline 7-genotyped type 2 d	iabetes patients. <u>Diab</u>		
	<u>Vasc Dis Res. 8: 221-8.</u>			
	12. Dorvignit, D. et al. (2012) Expression and biological characte	rization 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 Periphe	eral Blood B Cells Indicate		
	Altered TLR Signalling in Primary Sjögren's Syndrome Patients b	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. <u>PLoS One. 8 (5): e64159.</u>			
	17. Cook, S.R. et al. (2024) Multi-organ immunity on a 3D-printed	d multi-tissue chip with		
	tubing-free impeller pump. bioRxiv. Jun 01 [Epub ahead of print].			
Stores				
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 relate	ed U.S. and foreign		
	counterparts			
Health And Safety	Material Safety Datasheet documentation #20471 available at:			
Information	https://www.bio-rad-antibodies.com/SDS/MCA1940SBV515			
	20471			
Regulatory	For research purposes only			

# Related Products

## **Recommended Useful Reagents**

### HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bic	-rad.com	Email: antibody_sales_uk@bio	-rad.com	Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M422460:230907'

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