

# Datasheet: MCA1940SBY720

Description:	MOUSE ANTI HUMAN CD19:StarBright Yellow 720
Specificity:	CD19
Format:	StarBright Yellow 720
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 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 <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	-			Neat	
	Where this product ha	is not been tes	ted for	use in a particular tech	inique this does not	
	necessarily exclude its a guide only. It is reco system using appropri	mmended that	the use	er titrates the product f	g dilutions are given as or use in their own	
Target Species	Human					
Product Form	Purified IgG conjugated to StarBright Yellow 720 - liquid					
Max Ex/Em	Fluorophore	Excitation Ma	ıx (nm)	Emission Max (nm)		
	StarBright Yellow 720	549		719		
Preparation	Purified IgG prepared supernatant	by affinity chro	omatogr	aphy on Protein A fron	n tissue culture	
Buffer Solution	Phosphate buffered sa	aline				
Preservative	0.09% Sodium Azide (	(NaN <sub>3</sub> )				
Stabilisers	1% Bovine Serum Albumin					
	0.1% Pluronic F68	0.1% Pluronic F68				
	0.1% PEG 3350					
	0.05% Tween 20					

External Database Links Specificity	UniProt:       P15391       Related reagents         Entrez Gene:       930       CD19       Related reagents         Mouse anti Human CD19 antibody, clone LT19 recognizes human CD19 also known a 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 ( <u>de Rie <i>et al.</i> 1989</u> ). CD19 is the broadest lineage specific marker for B cells and functions as a B-cell co-receptor in conjunction with CD21 ( <u>Bradbury <i>et al.</i> 1992</u> ), CD9, CD81 and CD82 ( <u>Horváth <i>et al.</i> 1998</u> ). CD19 is implicated in the down-regulation of B cell growth and proliferation ( <u>Pezzutto <i>et al.</i> 1987</u> ).						
Flow Cytometry	Use 5 $\mu$ I of the suggested working dilution to label 10 <sup>6</sup> cells in 100 $\mu$ I. 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. <u>Int Immunol</u>. 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> (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 JAK2: a report from the International</li></ol>						

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 regulatedangiogenesis. PLoS One. 8 (5): e64159. Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. 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

Health And Safety Information	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1940SBY720">https://www.bio-rad-antibodies.com/SDS/MCA1940SBY720</a> 20471
Regulatory	For research purposes only

counterparts

## **Related Products**

Storage

Guarantee

#### **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@bio-ra	ad.com	Email: antibody_sales_uk@bio-ra	ad.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 'M418439.230420'

#### Printed on 08 Mar 2024

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