

Datasheet: MCA1940EL

BATCH NUMBER 165217

Description:	MOUSE ANTI HUMAN CD19:Low Endotoxin		
Specificity:	CD19		
Format:	Low Endotoxin		
Product Type:	Monoclonal Antibody		
Clone:	LT19		
Isotype:	lgG1		
Quantity:	0.5 mg		

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	•			1/50 - 1/100
Immunohistology - Frozen	•			
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation	•			
Western Blotting				

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 - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A supernatant	from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	None present	
Endotoxin Level	<0.01 EU/µg	

Approx. Protein	
Concentrations	

IgG concentration 1.0 mg/ml

External Database Links

UniProt:

P15391 Related reagents

Entrez Gene:

930 CD19 Related reagents

RRID

AB_566587

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 (<u>Bradbury et al. 1992</u>), CD9, CD81 and CD82 (<u>Horváth et al. 1998</u>). CD19 is implicated in the down-regulation of B cell growth and proliferation (<u>Pezzutto et al. 1987</u>).

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.

References

- 1. Hughes, G.J. *et al.* (2007) Virus immunocapture provides evidence of CD8 lymphocytederived HIV-1 *in vivo*. AIDS. 21: 1507-13.
- 2. Allen, J.S. *et al.* (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. Diabetes. 58: 138-45.
- 3. McIntosh, K. *et al.* (2006) The immunogenicity of human adipose-derived cells: temporal changes *in vitro*. Stem Cells. 24: 1246-53.
- 4. Sengstake, S. *et al.* (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. Int Immunol. 18 (7): 1171-8.
- 5. Villarroel Dorrego, M. *et al.* (2006) Transfection of CD40 in a human oral squamous cell carcinoma keratinocyte line upregulates immune potency and costimulatory molecules. <u>Br</u> J Dermatol. 154: 231-8.
- 6. Franz, B. *et al.* (2011) *Ex vivo* characterization and isolation of rare memory B cells with antigen tetramers. <u>Blood. 118: 348-57.</u>
- 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. <u>J Pharmacol Exp Ther. 347:</u> 164-72.
- 8. Franz, B. *et al.* (2011) Ex vivo characterization and isolation of rare memory B cells with antigen tetramers. <u>Blood. 118: 348-57.</u>
- 9. Girbl, T. *et al.* (2013) CD40-mediated activation of chronic lymphocytic leukemia cells promotes their CD44-dependent adhesion to hyaluronan and restricts CCL21-induced motility. Cancer Res. 73: 561-70.
- 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.

- 11. Kakko, T. et al. (2011) Inflammatory effects of blood leukocytes: association with vascular function in neuropeptide Y proline 7-genotyped type 2 diabetes patients. Diab 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.

Storage

Store at -20°C only.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA1940EL 10162
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) **RPE** Goat Anti Mouse IgG IgA IgM (STAR87...) HRP Goat Anti Mouse IgG (STAR76...) **RPE** Goat Anti Mouse IgG (STAR70...) **FITC**

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) **FITC** Goat Anti Mouse IgG (STAR77...) **HRP**

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

HRP

Rabbit Anti Mouse IgG (STAR13...)

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M417475:230330'

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