

Datasheet: MCA1940A647

Description:	MOUSE ANTI HUMAN CD19:Alexa Fluor® 647
Specificity:	CD19
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	LT19
Isotype:	IgG1
Quantity:	100 TESTS/1ml

Product Details

RRID AB_324759

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 - 1/10

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species Human

Product Form Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

Preparation Purified IgG from ascites prepared by precipitation and ion exchange chromatography

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.05 mg/ml

External Database Links
UniProt:
[P15391](https://www.uniprot.org/entry/P15391) [Related reagents](#)

Entrez Gene:

Specificity	<p>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).</p> <p>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).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ or 100ul whole blood.
References	<ol style="list-style-type: none">1. Hughes, G.J. <i>et al.</i> (2007) Virus immunocapture provides evidence of CD8 lymphocyte-derived HIV-1 <i>in vivo</i>. AIDS. 21: 1507-13.2. 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. Diabetes. 58: 138-45.3. McIntosh, K. <i>et al.</i> (2006) The immunogenicity of human adipose-derived cells: temporal changes <i>in vitro</i>. Stem Cells. 24: 1246-53.4. Sengstake, S. <i>et al.</i> (2006) CD21 and CD62L shedding are both inducible via P2X7Rs. Int Immunol. 18 (7): 1171-8.5. Villarreal 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. Br J Dermatol. 154: 231-8.6. Franz, B. <i>et al.</i> (2011) <i>Ex vivo</i> characterization and isolation of rare memory B cells with antigen tetramers. Blood. 118: 348-57.7. 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. J Pharmacol Exp Ther. 347: 164-72.8. Franz, B. <i>et al.</i> (2011) <i>Ex vivo</i> characterization and isolation of rare memory B cells with antigen tetramers. Blood. 118: 348-57.9. 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. Cancer Res. 73: 561-70.10. 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 BFM Study Group. Blood. 115: 1006-17.11. Kakko, T. <i>et al.</i> (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. <i>et al.</i> (2012) Expression and biological characterization of an anti-CD20 biosimilar candidate antibody: a case study. MAbs. 4 (4): 488-96.13. Karlsen, M. <i>et al.</i> (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. <i>et al.</i> (2018) Vaccine-elicited receptor-binding site antibodies neutralize two New World hemorrhagic fever arenaviruses. Nat Commun. 9 (1): 1884.15. Gu, Y. <i>et al.</i> (2019) Defining the structural basis for human alloantibody binding to human leukocyte antigen allele HLA-A*11:01. Nat Commun. 10 (1): 893.
Storage	Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 18 months from date of despatch.

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

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'M352785:190405'

Printed on 20 May 2019

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