

Datasheet: MCA1940F

BATCH NUMBER 167078

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| Description: | MOUSE ANTI HUMAN CD19:FITC |
| Specificity: | CD19 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | LT19 |
| Isotype: | IgG1 |
| Quantity: | 0.1 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 | ▪ | | | Neat - 1/10 |

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.

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| Target Species | Human | | |
| Product Form | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid | | |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nm) |
| | FITC | 490 | 525 |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant | | |
| Buffer Solution | Phosphate buffered saline | | |
| Preservative Stabilisers | 0.09% sodium azide (NaN ₃) | | |
| | 1% bovine serum albumin | | |
| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml | | |

External Database
Links

UniProt:

[P15391](#)

[Related reagents](#)

Entrez Gene:

[930](#)

CD19

[Related reagents](#)

RRID

AB_322286

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 10µl of the suggested working dilution to label 100µl of lysed whole peripheral blood

References

1. Hughes, G.J. *et al.* (2007) Virus immunocapture provides evidence of CD8 lymphocyte-derived 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. [Br J Dermatol. 154: 231-8.](#)
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.](#)
8. Franz, B. *et al.* (2011) *Ex vivo* characterization and isolation of rare memory B cells with antigen tetramers. [Blood. 118: 348-57.](#)
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 regulated-angiogenesis. [PLoS One. 8 \(5\): e64159.](#)

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| Storage | This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C. |
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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| Guarantee | 12 months from date of despatch |
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| Health And Safety Information | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1940F10041 |
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| Regulatory | For research purposes only |
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

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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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