

Datasheet: MCA1940SBUV445

| Description: | MOUSE ANTI HUMAN CD19:StarBright UltraViolet 445 |
|---------------|--|
| Specificity: | CD19 |
| Format: | StarBright UltraViolet 445 |
| 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 www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | | | | Neat |

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 conjugate | Purified IgG conjugated to StarBright UltraViolet 445 - liquid | | | |
| Max Ex/Em | Fluorophore Excitation Max (nm) Emission Max (nm | | | | |
| | StarBright UltraViolet 445 | 347 | 440 | | |
| Preparation | Purified IgG prepared | by affinity chromatog | raphy on Protein A | | |
| | supernatant | | | | |
| Buffer Solution | supernatant Phosphate buffered s | aline | | | |
| Buffer Solution Preservative | · | | | | |
| | Phosphate buffered s | (NaN ₃) | | | |
| Preservative | Phosphate buffered s | (NaN ₃) | | | |
| Preservative | Phosphate buffered s 0.09% sodium azide (1% bovine serum albi | (NaN ₃) | | | |

Approx. Protein Concentrations

For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.

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 *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 (Pezzutto et al. 1987).

Flow Cytometry

Use 5μ I of the suggested working dilution to label 10^6 cells in 100μ I. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

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. <u>Diabetes</u>. 58: 138-45.
- 3. McIntosh, K. *et al.* (2006) The immunogenicity of human adipose-derived cells: temporal changes *in vitro*. <u>Stem Cells. 24: 1246-53.</u>
- 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. 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. <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. <u>Cancer Res. 73: 561-70.</u>
- 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 +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 related U.S. and foreign counterparts |
| Health And Safety | Material Safety Datasheet documentation #20471 available at: |
| Information | https://www.bio-rad-antibodies.com/SDS/MCA1940SBUV445 |
| | 20471 |
| Regulatory | For research purposes only |
| | |

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South Tel: +1 800 265 7376 America

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_us@bio-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 'M435271:250224'

Printed on 10 Apr 2025