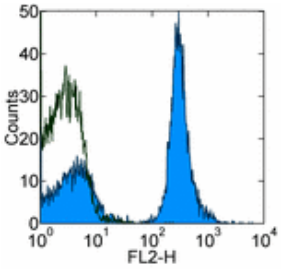
eBioscience
the new standard of excellence™

Tel: 888.999.1371 or 858.642.2058
Fax: 858.642.2046
Web: www.ebioscience.com
E-mail: info@ebioscience.com

Product Information

Contents: Biotin anti-mouse CD19
Catalog Number: 13-0191
Sizes: 50 ug, 100 ug, 500 ug, 1 mg
Formulation: Phosphate buffer pH 7.2, 500 mM NaCl, 0.09% NaN_3
Storage Conditions: Store at 4°C. DO NOT FREEZE.
Clone: MB19-1
Isotype: Mouse IgA, κ



Staining of C57Bl/6 splenocytes with SAv-PE alone (open histogram) or 0.5 µg of Biotin anti-mouse CD19 (MB19-1) (colored histogram) followed by SAv-PE (cat. 12-4312). Total viable cells were used for analysis.

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-0191	FITC anti-mouse CD19	488	518	FC
12-0191	PE anti-mouse CD19	488	575	FC
13-0191	Biotin anti-mouse CD19	N/A	N/A	FC
14-0191	Affinity Purified anti-mouse CD19	N/A	N/A	FA FC IP
15-0191	PE-Cy5 anti-mouse CD19	488	670	FC
16-0191	Coming Soon! - Functional Grade* Purified anti-mouse CD19	N/A	N/A	FA
17-0191	APC anti-mouse CD19	633	660	FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

Description

The MB19-1 monoclonal antibody reacts with mouse CD19, a 95 kDa transmembrane glycoprotein. CD19 is expressed by B cells during all stages of development excluding the terminally differentiated plasma cells. Follicular dendritic cells also express CD19. Together CD21, CD81, MHC class II, and CD19 form a multimolecular complex that associates with BCR. Signaling through CD19 induces tyrosine phosphorylation, calcium flux and proliferation of B cells. Staining of B cells with MB19-1 and its conjugates is usually dimmer than the rat anti-mouse CD19 antibody, clone 6D5.

Usage

For research use only, not for diagnostic or therapeutic use. The MB19-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

The MB19-1 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 1 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 11-0191 FITC anti-mouse CD19 (clone MB19-1)
Cat. 12-0191 PE anti-mouse CD19 (clone MB19-1)
Cat. 14-0191 Affinity Purified anti-mouse CD19 (clone MB19-1)
Cat. 15-0191 PE-Cy5 anti-mouse CD19 (clone MB19-1)

Cat. 17-0191 APC anti-mouse CD19 (clone MB19-1)
Cat. 12-0192 PE anti-mouse CD19 (clone 6D5)
Cat. 14-0192 Affinity Purified anti-mouse CD19 (clone 6D5)
Cat. 15-0192 PE-Cy5 anti-mouse CD19 (clone 6D5)
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)

References

Engel, P., L. J. Zhou, et al. (1995). "Abnormal B lymphocyte development, activation, and differentiation in mice that lack or overexpress the CD19 signal transduction molecule." Immunity 3(1): 39-50.

Sato, S., N. Ono, et al. (1996). "CD19 regulates B lymphocyte signaling thresholds critical for the development of B-1 lineage cells and autoimmunity." J Immunol 157(10): 4371-8.

Sato, S., D. A. Steeber, et al. (1997). "CD19 expression levels regulate B lymphocyte development: human CD19 restores normal function in mice lacking endogenous CD19." J Immunol 158(10): 4662-9.

Tedder, T. F., M. Inaoki, et al. (1997). "The CD19-CD21 complex regulates signal transduction thresholds governing humoral immunity and autoimmunity." Immunity 6(2): 107-18.