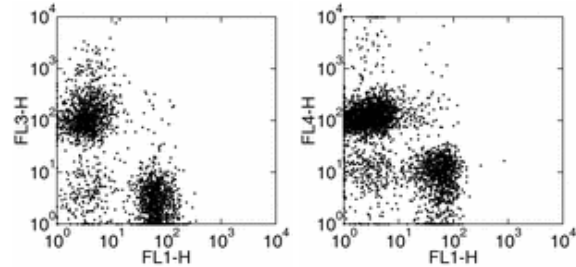


Product Information

Contents: Affinity Purified anti-mouse CD19
Catalog Number: 14-0191
Sizes: 50 ug, 100 ug, 500 ug, 1 mg
Formulation: Phosphate buffer pH 7.2,
500 mM NaCl, 0.09% NaN₃
Storage Conditions: Store at 4°C.
Avoid repeated freeze/thaw cycles.
Clone: MB19-1
Isotype: Mouse IgA, κ



Two-color surface staining of mouse splenocytes with anti-mouse CD19 (MB19-1), PE-Cy5 (left) and APC (right), and anti-mouse CD3e (145-2C11) FITC. Total 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, and immunoprecipitation. MB19-1 has also been reported in *in vitro* functional studies. (Please use Functional Grade purified MB19-1 in functional assays.)

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. 13-0191 Biotin 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. 11-4204 Fluorescein isothiocyanate (FITC) anti-mouse IgA (clone mA-6E1)
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 14-4762 Affinity Purified Mouse IgA Isotype Control
Cat. 13-5994 Biotin anti-mouse IgA (clone 11-44-2)

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.