

Datasheet for 200-508-M72

CD19 Phycoerythrin Antibody

Overview

Description:	Anti-CD19 (RAT) Phycoerythrin Conjugated Monoclonal Antibody - 200-508-M72
Item No.:	200-508-M72
Size:	25 µg
Applications:	FC
Reactivity:	Mouse
Host Species:	Rat

Product Details

Background: CD19 is a member of the immunoglobulin superfamily with 556 amino acid and two immunoglobulin-like C2-type domains. As a cell surface protein, CD19 is known to form a complex with CD21, CD81 and CD225 in the membrane of mature B cells. A major function of CD19 is to assemble with the antigen receptor of B lymphocytes so as to decrease the threshold for antigen receptor dependent stimulation thus enhancing the specificity and sensitivity of B cells towards antigens. Thus CD19 is an important protein for B cell antigen receptor signaling and regulation and also acts as a specialized adaptor protein for the amplification of Src family needed for this purpose. Regulation of growth of B cells is a major function of CD19 and its expression is confined to only B lymphocytes and follicular dendritic cells of the hematopoietic system. Increased expression of CD19 induces the production of auto-antibody thus giving an insight to the regulatory role of CD19 in autoimmunity. Defects in CD19 are a cause of hypogammaglobulinemia.

Synonyms:	B-lymphocyte antigen CD19, Differentiation antigen CD19, CD19
Host Species:	Rat
Conjugate:	R-Phycoerythrin (RPE)
Clonality:	Monoclonal
Clone ID:	1D3
Format:	IgG2a
F/P Ratio:	1-2

Target Details

Gene Name:	Cd19
Reactivity:	Mouse
Immunogen Type:	Other
Immunogen:	Anti-CD19 Antibody (Monoclonal) was produced by repeated immunizations with mouse CD19 transfected cell line.
Purity/Specificity:	Phycoerythrin conjugated CD19 Monoclonal Antibody was Protein G Purified from tissue culture supernatant and is directed against mouse CD19. Reactivity is observed against mouse CD19. Cross reactivity with CD19 from other sources has not been tested.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P25918• NCBI - NP_033974.2• GeneID - 12478

Application Details

Tested Applications:	FC
Application Note:	Anti-CD19 is tested for Flow Cytometry (Cell Surface). Researchers should determine optimal titers for applications that are not stated.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
FC:	0.25-1µg/10 ⁶ cells

Formulation

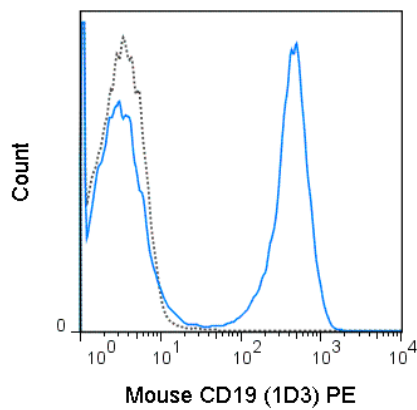
Physical State:	Liquid (sterile filtered)
Concentration:	0.2 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	0.1% Gelatin

Shipping & Handling

Shipping Condition:	Wet Ice
----------------------------	---------

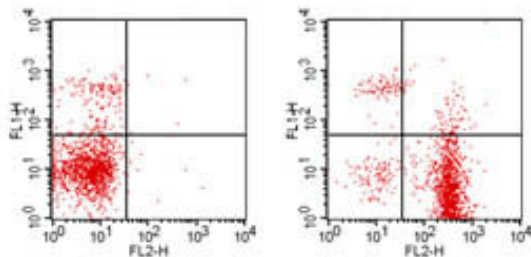
Storage Condition:	Store vial at 4° C prior to opening. Dilute only prior to immediate use. This product is stable at 4° C as an undiluted liquid. Use subdued lighting during handling and incubation of cells prior to analysis. Store reagent in the dark. DO NOT FREEZE.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



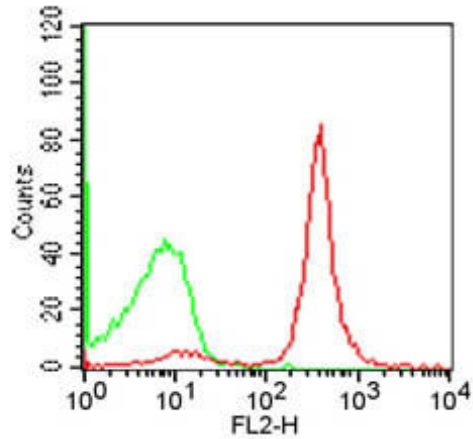
Flow Cytometry

Flow Cytometry of Rat anti-MOUSE CD19 antibody Phycoerythrin conjugated. Cells: C57CL/6 mouse splenocytes. Stimulation: none. Antibody: (GRAY) PE RAT IgG2a isotype control antibody; (BLUE) Phycoerythrin Anti-CD19 rat secondary antibody using 0.125 µg.



Flow Cytometry

Cell Surface Flow Cytometry of Rat anti-MOUSE CD19 antibody Phycoerythrin conjugated. Cells: BALB/c mouse splenocytes. Stimulation: none. Antibody: (left) isotype control antibody; (right) Phycoerythrin Anti-CD19 rat secondary antibody using 1 µg. Also stained with Anti-CD4 Fluorescein Conjugated Antibody.



Flow Cytometry

Cell Surface Flow Cytometry of Rat anti-MOUSE CD19 antibody Phycoerythrin conjugated. Cells: BALB/c mouse splenocytes. Stimulation: none. Antibody: (GREEN) isotype control antibody; (RED) Phycoerythrin Anti-CD19 rat secondary antibody using 1 µg.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.