

Rat Anti-Mouse Immunoglobulin M R-PE Monoclonal Antibody

Mouse, Monoclonal (Immunoglobulin M)

Cat. No. DMAB4814

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Mab to IgM

Rat Monoclonal Antibody to Mouse Immunoglobulin M(IgM),
 μ heavy chain

Clone: 2C5B2

Ig Isotype: Rat IgG₁k

Format: R-phycoerythrin (R-PE) Conjugate

Quality: 0.1 mg

Specificity: Reacts with the μ heavy chain of mouse IgM

Applications: Identification and enumeration of IgM⁺ cells by flow cytometry; Identification and enumeration of IgM⁺ cells by immunofluorescence microscopy; Second step reagent for mouse IgM monoclonal antibodies; Enzyme-Linked-Immunosorbent-Assay (ELISA)

Characterization: To ensure lot-to-lot consistency, each batch of monoclonal antibody is tested to conform to characteristics of a standard reference reagent using immunofluorescence staining. Representative data are included in this data sheet.

Working Dilutions:

Flow Cytometry: $\leq 0.2 \mu\text{g}/10^6$ cells

Other Applications: Since applications vary, each investigator should determine the optimum working dilutions of the product that is appropriate for their specific needs.

Handling And Storage: The R-phycoerythrin (R-PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze! Protect conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning: Reagents contain sodium azide. Sodium azide is very toxic if ingested or inhaled. Avoid contact with skin, eyes, or clothing. Wear eye or face protection when handling. If skin or eye contact occurs, wash with copious amounts of water. If ingested or inhaled, contact a physician immediately. Sodium azide yields toxic hydrazoic acid under acidic conditions. Dilute azide-containing compounds in running water before discarding to avoid accumulation of potentially explosive deposits in lead or copper plumbing.

BACKGROUND

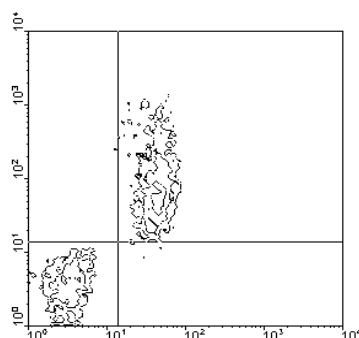
Introduction: Immunoglobulin M, or IgM for short, is a basic antibody that is produced by B cells. It is the primary antibody against A and B antigens on red blood cells. IgM is by far the physically largest antibody in the human circulatory system. It is the first antibody to appear in response to initial exposure to antigen.

Keywords: Constant region of heavy chain of IgM; Hepatitis B virus receptor binding protein; Ig mu chain C region; IGHM; Immunoglobulin mu chain; Immunoglobulin heavy chain; VH; IgM; Immunoglobulin M; IgM μ ; Immunoglobulin M μ ; IgM heavy chain; Immunoglobulin M heavy chain; IgM μ heavy chain; Immunoglobulin M μ heavy chain

REFERENCES

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2. Erik J. Wiersma, Cathy Collins, Shafie Fazel, and Marc J. Shulman Structural and Functional Analysis of J Chain-Deficient IgM J. Immunol., Jun 1998; 160: 5979 - 5989.
^ Wellek, B.; Hahn, H., Opferkuch, W. (1 February 1976). "Opsonizing activities of IgG, IgM antibodies and the C3b inactivator-cleaved third component of complement in macrophage phagocytosis". Agents and Actions 6 (1-3): 260-262. doi:10.1007/BF01972219. PMID 941799. Retrieved 24 March 2011.

IMMUNOFLUORESCENT STAINING



Cells from BALB/c spleen were doublestained with rat anti-mouse IgM-R-PE and rat anti-mouse CD19-FITC (Cat. No. 1575-02, Clone 6D5), following which small lymphocytes were gated and analyzed using a FACScan™ flow cytometer (BDIS, San Jose, CA).

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