

Rat Anti-Mouse IgD Monoclonal Antibody, R-PE Conjugated

Rat, Monoclonal (Immunoglobulin D)

Cat. No. DMAB4671

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Mab to IgD

Rat Monoclonal Antibody to Mouse Immunoglobulin D (IgD),
δ chain specific

Clone: 12-27d

Ig Isotype: Rat IgG_{2ak}

Format: R-phycoerythrin (R-PE) Conjugate

Quality: 0.1 mg

Specificity: δ heavy chain of mouse IgD

The monoclonal antibody 12-27d reacts with mouse IgD of all haplotypes (e.g., IgDa, IgDb, IgDc), and does not react with other immunoglobulin isotypes. 12-27d does not induce proliferation of mature B cells in vitro, nor does in vivo injection of the monoclonal antibody have any effect on activation of mature B lymphocytes.

Applications: Flow cytometry

Characterization: To insure acceptable performance, each batch of product is tested by flow cytometry to conform with the characteristics of a standard reference reagent. Representative data are included with this product insert.

Working Dilutions:

Flow Cytometry: ≤0.2 μg/10⁶ cells;

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

Immunofluorescent Staining:

Amount Used: ≤ 1 μg/10⁶ cells

BALB/c splenocytes were double-stained with rat anti-mouse IgD-FITC and rat anti-mouse CD19-R-PE (Cat. No. 1575-09, Clone 6D5). Small lymphocytes were then gated and analyzed using a FACScan™ flow cytometer (BDIS, San Jose, CA).

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. Aliquot and freeze the low endotoxin, azide-free product at -20°C immediately upon receipt. Each reagent is stable for the period shown on the bottle 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 D (IgD) is an antibody isotype that makes up about 1% of proteins in the plasma membranes of mature B-lymphocytes where it is usually coexpressed with another cell surface antibody called IgM. IgD is also produced in a secreted form that is found in very small amounts in blood serum. Secreted IgD is produced as a monomeric antibody with two heavy chains of the delta (δ) class, and two Ig light chains.

Keywords: IGHD; Immunoglobulin heavy constant delta; IgD; IgD δ; Immunoglobulin D; Immunoglobulin D δ; IgD heavy chain; Immunoglobulin D heavy chain; IgD δ heavy chain; Immunoglobulin D δ heavy chain

REFERENCES

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