

Mouse Anti-Human Immunoglobulin D R-PE Monoclonal Antibody

Mouse, Monoclonal (Immunoglobulin D) Cat. No. DMAB4792 Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Mab to IgD

Mouse Monoclonal Antibody to Human Immunoglobulin D (IgD), δ heavy chain *Clone:* IJADB7

Ig Isotype: Mouse IgG_{2a}k

Format: R-phycoerythrin (R-PE) Conjugate Quality: 0.1 mg

Specificity: Reacts with the heavy chain of human IgD as demonstrated by ELISA; may also react with IgD from other species.

Applications: Indirect immunofluorescent staining of IgD+ human B lymphocytes; Enzyme-Linked-Immunosorbent-Assay (ELISA); Western blotting; Dot- and slot-

immunoblotting; Immunohistochemistry (frozen sections); Immunocytochemistry; Fluorescent-Linked-Immunosorbent-Assay (FLISA)

Characterization: To insure lot-to-lot consistency, each batch of product is tested by ELISA and/or FLISA for conformance to characteristics of a standard reference reagent. *Working Dilutions:*

FLISA: 1µg

Other Applications: Since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.

Handling And Storage: The R-phycoerythrin (R-PE) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C. Do not freeze! 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.

 $\label{eq:constant} \begin{array}{l} \textit{Keywords:} \ \mbox{IGHD}; \ \mbox{Immunoglobulin heavy constant delta; IgD}; \\ \mbox{Immunoglobulin D}; \ \mbox{IgD} \delta; \ \mbox{Immunoglobulin D} \delta; \ \mbox{IgD heavy chain}, \\ \mbox{Immunoglobulin D heavy chain; IgD} \delta heavy chain; \ \mbox{Immunoglobulin D} \delta heavy chain \\ \mbox{noglobulin D} \delta heavy chain \\ \end{array}$

REFERENCES

1. Ohta, Yuko; Martin Flajnik (2006-07-11). "IgD, like IgM, is a primordial immunoglobulin class perpetuated in most jawed vertebrates". Proceedings of the National Academy of Sciences 103 (28): 10723–10728.

2. Chen, Kang; Weifeng Xu, Melanie Wilson, Bing He, Noman W Miller, Eva Bengten, Eva-Stina Edholm, Paul A Santini, Poonam Rath, April Chiu, Marco Cattalini, Jiri Litzman, James B Bussel, Bihui Huang, Antonella Meini, Kristian Riesbeck, Charlotte Cunningham-Rundles, Alessandro Plebani, Andrea Cerutti (2009). "Immunoglobulin D enhances immune surveillance by activating antimicrobial, proinflammatory and B cellstimulating programs in basophils". Nat Immunol 10 (8): 889– 898.

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