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

Rat, Monoclonal (IgE)
Cat. No. DMAB4689
Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Mab to IgE; Rat Monoclonal Antibody to Mouse Immunoglobulin E (IgE), ε heavy chain
Clone: 24H4
Ig Isotype: Rat IgG1κ
Format: R-phycoerythrin (R-PE) Conjugate
Quality: 0.2 mg
Specificity: Reacts with the ε heavy chain of BALB/c mouse IgE as demonstrated by ELISA.
Applications: Identification and enumeration of IgE^+ cells by flow cytometry; Identification and enumeration of IgE^+ cells by immunofluorescence microscopy; 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 and analysis by flow cytometry and/or enzyme linked immunosorbent assay (ELISA).
Working Dilutions: Flow Cytometry: R-phycoerythrin conjugate ≤0.2 µg/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/NaN_3 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: In biology, Immunoglobulin E (IgE) is a class of antibody (or immunoglobulin "isotype") that has been found only in mammals. IgE is a monomeric antibody with 4 Ig-like domains (CH1->CH4). It plays an important role in allergy, and is especially associated with type 1 hypersensitivity. IgE has also been implicated in immune system responses to most parasitic worms like Schistosoma mansoni, Trichinella spiralis, and Fasciola hepatica, and may be important during immune defense against certain protozoan parasites such as Plasmodium falciparum. Although IgE is typically the least abundant isotype - blood serum IgE levels in a normal ("non-atopic") individual are only 0.05% of the Ig concentration, compared to 10 mg/ml for the IgGs (the isotypes responsible for most of the classical adaptive immune response) - it is capable of triggering the most powerful immune reactions. IgE was discovered in 1966 by the Japanese scientist couple Teruka and Kimishige Ishizaka.
Keywords: Igh2; IGHE; IGHEP1; Immunoglobulin heavy constant epsilon; IgE; Immunoglobulin E; IgE ε; Immunoglobulin E ε; IgE heavy chain; Immunoglobulin E heavy chain; IgE ε heavy chain; Immunoglobulin E ε heavy chain

REFERENCES

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