

Mouse Anti-Human IgA1 Monoclonal Antibody, R-PE Conjugated

Mouse, Monoclonal (IgA1)

Cat. No. DMAB4759

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Mab to IgA1; Mouse Monoclonal Antibody to Human Immunoglobulin A1, Fc portion of $\alpha 1$ heavy chain

Clone: C3507B5

Ig Isotype: Mouse IgG1k

Source: Ascites fluid

Format: R-phycoerythrin (R-PE) Conjugate

Quality: 0.1 mg

Specificity: Reacts with the Fc portion of the heavy chain of human IgA1 as demonstrated by ELISA

Applications: Enzyme-Linked-Immunosorbent-Assay (ELISA); Western blotting; Dot- and slot-immunoblotting; Immunohistochemistry (frozen sections); Immunocytochemistry

Characterization: To insure lot-to-lot consistency, each batch of product is tested by ELISA for conformance to characteristics of a standard reference reagent.

Working Dilutions: Immunofluorescence: R-PE conjugate $\leq 0.2 \mu\text{g}/10^6$ cells; 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/ NaN_3 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 A (IgA) is an antibody that plays a critical role in mucosal immunity. More IgA is produced in mucosal linings than all other types of antibody combined; between three and five grams are secreted into the intestinal lumen each day. This accumulates to 75% of the total immunoglobulin produced in the entire body. IgA has two subclasses (IgA1 and IgA2) and can exist in a dimeric form called secretory IgA (sIgA). In its secretory form, IgA is the main immunoglobulin found in mucous secretions, including tears, saliva, colostrum and secretions from the genitourinary tract, gastrointestinal tract, prostate and respiratory epithelium. It is also found in small amounts in blood. The secretory component of sIgA protects the immunoglobulin from being degraded by proteolytic enzymes, thus sIgA can survive in the harsh gastrointestinal tract environment and provide protection against microbes that multiply in body secretions. IgA is a poor activator of the complement system, and opsonises only weakly. Its heavy chains are of the type α .

Keywords: Ig alpha 1 chain C region; IGHA1; immunoglobulin heavy constant alpha 1; IgA1; Immunoglobulin A1; IgA1 $\alpha 1$; Immunoglobulin A1 $\alpha 1$; IgA1 heavy chain; Immunoglobulin A1 heavy chain; IgA1 $\alpha 1$ heavy chain; Immunoglobulin A1 $\alpha 1$ heavy chain; IgA1, Fc portion of $\alpha 1$ heavy chain; Immunoglobulin A1, Fc portion of $\alpha 1$ heavy chain; IgA1, Fc; Immunoglobulin A1, Fc

REFERENCES

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45-16 Ramsey Road Shirley, NY 11967, USA
Tel: 631-624-4882 · Fax: 631-614-7828
E-mail: info@creative-diagnostics.com
www.creative-diagnostics.com