

## Mouse Anti-Rabbit IgG Monoclonal Antibody, R-PE Conjugated

Mouse, Monoclonal (IgG) Cat. No. DMAB4783 Lot. No. (See product label)

## **PRODUCT INFORMATION**

*Product Overview:* Mab to IgG; Mouse Monoclonal Antibody to Rabbit Immunoglobulin G heavy chain *Clone:* 3B10

Ig Isotype: Mouse IgG1

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

Specificity: Reacts with the heavy chain of all subclasses of rabbit IgG as demonstrated by ELISA; may also react with IgG from other species.

**Applications:** Enzyme-Linked-Immunosorbent-Assay (ELISA); Flow cytometry

**Characterization:** To ensure lot-to-lot consistency, each batch of product is tested by ELISA, Fluorescent ELISA, and/ or flow cytometry to conform to characteristics of a standard reference reagent.

**Working Dilutions:** Flow Cytometry: R-phycoerythrin conjugate  $\leq 0.3 \mu g/10^6$  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<sub>3</sub> 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 G (IgG) are antibody molecules. Each IgG is composed of four peptide chains-two heavy chains y and two light chains. Each IgG has two antigen binding sites. Other Immunoglobulins may be described in terms of polymers with the IgG structure considered the monomer. IgG molecules are synthesized and secreted by plasma B cells. IgG antibodies are large molecules of about 150 kDa composed of 4 peptide chains. It contains 2 identical heavy chains of about 50 kDa and 2 identical light chains of about 25 kDa, thus a tetrameric guatemary structure. The two heavy chains are linked to each other and to a light chain each by disulfide bonds. The resulting tetramer has two identical halves, which together form the Y-like shape. Each end of the fork contains an identical antigen binding site. The Fc regions of IgGs bear a highly conserved N-glycosylation site. The N-glycans attached to this site are predominantly core-fucos vlated diantennary structures of the complex type. In addition, small amounts of these N-glycans also bear bisecting GlcNAc and  $\alpha$ -2,6-linked sialic acid residues.

*Keywords:* Ig gamma 1 chain C region; IGHG1; Immunoglobin heavy constant gamma 1; Immunoglobulin G; IgG; Immunoglobulin G heavy chain; IgG heavy chain

## REFERENCES

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2. Kolde HJ, Dostatni R, Mauracher S. (2011) "Rapid and simple IgG specific test for the exclusion of heparin induced thrombocytopenia (HIT)." Clin Chem Lab Med. 2011 Aug 30.

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