Rat Anti-Mouse IgG1 Monoclonal Antibody, R-PE Conjugated

Rat, Monoclonal (IgG1)
Cat. No. DMAB4705
Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Mab to IgG1; Rat Monoclonal Antibody to Mouse Immunoglobulin G1 (IgG1)
Clone: TB78e
Ig Isotype: Rat IgG2b
Format: R-phycoerythrin (R-PE) Conjugate
Quality: 0.1 mg
Specificity: Reacts with Mouse IgG1 as demonstrated by ELISA. Minimal reaction to Human, Goat and Rabbit IgG.
Applications: Enzyme-Linked-Immunosorbent-Assay (ELISA); Flow Cytometry
Characterization: To ensure lot-to-lot consistency, each batch of product is tested by ELISA and/or Flow Cytometry to conform to the characteristics of a standard reference reagent.
Working Dilutions: Immunofluorescence: RPE Conjugate ≤0.1µg/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/NaN3 and a stabilizing agent. Store at 2-8°C. Do not freeze! Protect fluorochrome-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 γ 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 quaternary 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-fucosylated diantennary structures of the complex type. In addition, small amounts of these N-glycans also bear bisecting GlcNAc and α-2,6-linked sialic acid residues.
Keywords: Ig gamma 1 chain C region; IGHG1; Immunoglobulin heavy constant gamma 1 (G1m marker); IgG1; Immunoglobulin G1

REFERENCES

1. Stadlmann J, Pabst M, Kolarich D, Kunert R, Altmann F. (2008) Analysis of immunoglobulin glycosylation by LC-ESI-MS of glycopeptides and oligosaccharides. Proteomics. 2008 Jul; 8 (14): 2858-2871.
2. Hashira S, Okitsu-Negishi S, Yoshino K (August 2000). "Placental transfer of IgG subclasses in a Japanese population". Pediatr Int 42 (4): 337–342.

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