Mouse Anti-Human IgG(Fc) Monoclonal Antibody, CY5 Conjugated

Mouse, Monoclonal (IgG CY5)
Cat. No. DMAB4880
Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: MAb to IgG
Mouse Monoclonal Antibody to Human Immunoglobulin G(IgG), γ chain specific
Clone: I3
Ig Isotype: Mouse IgG2bκ
Format: Cyanine 5 (CY™5) Conjugate
Quality: 0.1 mg
Specificity: Reacts with the Fc portion of the heavy chain of all subclasses of human IgG as demonstrated by ELISA; may also react with IgG from other species.
Applications: Indirect immunofluorescent staining of IgG^+ human B lymphocytes; 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 and/or Flow Cytometry for conformance to characteristics of a standard reference reagent.
Working Dilutions: Immunofluorescence: ⩽0.3 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 Cyanine 5 (CY™5) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN3. Store at 2-8°C.
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: Immunoglobulin G; IgG; IgG γ; Immunoglobulin G γ; IgG heavy chain; Immunoglobulin G heavy chain; IgG γ heavy chain; Immunoglobulin G γ heavy chain

REFERENCES

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