

# Mouse Anti-Goat IgG Fc Monoclonal Antibody, R-PE Conjugated

## Mouse, Monoclonal (Immunoglobulin G)

Cat. No. DMAB4676

Lot. No. (See product label)

### PRODUCT INFORMATION

**Product Overview:** Mab to IgG

Mouse Monoclonal Antibody to Goat Immunoglobulin G (IgG), Fc specific

Antigen: Pooled Goat IgG ( Kappa and Lambda)

**Purification:** Protein G purification

**Clone:** TB116h

**Ig Isotype:** Mouse IgG<sub>2b</sub>

**Format:** R-phycoerythrin (R-PE) Conjugate

**Quality:** 0.1 mg

**Specificity:** Reacts with Goat IgG Fc as demonstrated by ELISA. Minimal cross reactivity with mouse, rat, human, rabbit, bovine, cat, horse, pig, donkey, and guinea pig serum proteins.

**Applications:** Enzyme-Linked-Immunosorbent-Assay (ELISA)

**Characterization:** To ensure lot-to-lot consistency, each batch of monoclonal antibody is tested by flow cytometry to conform to characteristics of a standard reference. Representative data are included in this product insert.

**Working Dilutions:**

**Immunofluorescence:** ≤ 0.1 µg/10<sup>6</sup> 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 of PBS/NaN<sub>3</sub> 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.

### BACKGROUND

**Introduction:** Immunoglobulin G (IgG) are antibody molecules. Each IgG is composed of four peptide chains — two heavy chains  $\gamma$  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  $\alpha$ -2,6-linked sialic acid residues.

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

### REFERENCES

1. Mallery DL, McEwan WA, Bidgood SR, Towers GJ, Johnson CM, James LC (2010). "Antibodies mediate intracellular immunity through tripartite motif-containing 21 (TRIM21)". Proc. Natl. Acad. Sci. U.S.A. 107 (46): 19985–19990.
2. 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):2858-2571.

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