3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-Mouse IgG (Fab specific)–Biotin
produced in goat, affinity isolated antibody
adsorbed with bovine, horse and human serum proteins

Catalog Number **B7151**

Product Description

Anti-Mouse IgG (Fab specific) is produced in goat using purified mouse IgG, Fab fragment, as the immunogen. Antibody is isolated from goat anti-mouse IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fab fragment of mouse IgG. Anti-Mouse IgG is conjugated to biotin ε-amino caproic acid-N-hydroxysuccinimide ester by covalent attachment. The antibody preparation is solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Solid phase adsorption with bovine and horse serum proteins ensures minimal cross reactivity with horse or fetal calf serum in hybridoma media.

Specificity of Anti-Mouse IgG (Fab specific)-Biotin is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for mouse IgG and mouse IgG Fab fragment. Cross reactivity of the antibody-conjugate is also determined by ELISA. The conjugate shows no reactivity with mouse IgG Fc fragment, human IgG, IgA, IgM, kappa and lambda light chain, bovine IgG and IgM, or horse IgG.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion against anti-goat IgG and anti-goat whole serum result in single arcs of precipitation.

Reagents

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, with 15 mM sodium azide as a preservative.

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet USDA requirements.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C for up to one month.

For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Antibody content is at least 2 mg/ml
Direct ELISA: titer 1:200,000-1:300,000
Titer is defined as the dilution of conjugate that gives a change in absorbance of 1.0 at 450 nm after 30 minutes of substrate conversion at 25 °C.[1,2].

Microtiter plates are coated with purified mouse IgG at a concentration of 1 µg/ml in 0.05 M carbonate/bicarbonate buffer pH 9.6
Carbonate/Bicarbonate Buffer capsules are available as Catalog Number C3041.

Following incubation with the biotinylated antibody, a 2 µg/ml solution of ExtrAvidin®-Peroxidase, Catalog Number E2886, is added.

Substrate: 0.04% *o*-Phenylenediamine Dihydrochloride* (OPD), Catalog Number P8412, and 0.012% hydrogen peroxide* (H_2O_2), Catalog Number H1009, in phosphate-citrate buffer, pH 5.0 (25.7 mL 0.2 M dibasic sodium phosphate, Catalog Number S0876, 24.3 ml 0.1 M citric acid, Catalog Number C7129, and 50 mL deionized water).
*Add immediately before use.

Immunoblotting: a working dilution of 1:400.000 - 1:800,000 is determined using immunoblot assay detecting β-Actin in total cell extract of HeLa cells (5-10 μg per well)

Immunohistology: a dilution of at least 1:200 was determined in an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-Human IgG, Catalog Number I5885, as primary antibody and ExtrAvidin-Peroxidase at 25 μg/ml.

Note: working dilutions should be determined by titration assay. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

References

1. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).
2. Guesdon, J.L., et al., J. Histochem. and Cytochem., **27**, 1131 (1979).

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