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Product Information

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

Catalog Number **B7401**

Product Description

Antiserum is produced in goat using purified mouse IgG, Fc 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 Fc fragment of mouse IgG. Anti-Mouse IgG is conjugated to biotin ε-amino caproic acid-N-hydroxysuccinimide ester through 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 (Fc specific)-Biotin is determined by ELISA. The conjugate is specific for mouse IgG and mouse IgG, Fc fragment. Cross reactivity of the antibody-conjugate is also determined by ELISA. The conjugate shows no reactivity with mouse IgG Fab 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 versus anti-goat IgG and anti-goat whole serum result in single arcs of precipitation.

Reagent

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

For continuous use, 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: ≥2 mg/ml

1. ELISA: minimum 1:160,000
   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]

   Multiwell 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: *o*-Phenylenediamine dihydrochloride (OPD), Catalog Number P8287, 0.4 mg/ml in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate. Phosphate-Citrate Buffer with Sodium Perborate capsules are available as Catalog Number P4922.

2. Immunobloting: Working dilution of 1:300,000 is determined using immunoblot assay detecting β-Actin in total cell extract of HeLa cells (5–10 µg per well).

3. Immunohistochemistry: a minimum working dilution of 1:400 was determined by an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-Human IgG, Cat. No. 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., Bulletin WHO, **53**, 55 (1976).
2. Guedson, J.L., et al., J. Histochem. and Cytochem., **27**, 1131 (1979).

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