



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

ANTI-MOUSE IgG (γ -CHAIN SPECIFIC) BIOTIN CONJUGATE

Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody

Product No. **B 7022**

Product Description

Antiserum is developed in goat using purified mouse IgG as the immunogen. Affinity isolation removes essentially all goat serum proteins, including immunoglobulins which do not specifically bind to the γ -chain of mouse IgG. Goat anti-mouse IgG is conjugated to Sigma N-Hydroxysuccinimidobiotin (Product No. H 1759) by a modification of the method of Bayer, et al.¹

Specificity of the Biotin Conjugated Anti-Mouse IgG is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for mouse IgG when tested against mouse IgA, IgG (all subclasses), and IgM.

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.

Reagents

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 15 mM sodium azide as a preservative.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Product Profile

The minimum working dilution by ELISA is 1:20,000. Working dilution is defined as the dilution of conjugate that will give a change in absorbance of 1.0 at 492 nm after 30 minutes of substrate conversion at 25 °C (Voller, et al., and Guedson et al.).^{2,3} Microtiter plates are coated with purified mouse IgG at a concentration of 200 ng/ml in 0.05 M carbonate/bicarbonate buffer pH 9.6 (Carbonate/Bicarbonate Buffer Capsules are available as Product No. C 3041). Following incubation with the biotinylated antibody, Avidin-Horseradish Peroxidase (Product No. A 3151, diluted in 0.01 M phosphate buffered saline, pH 7.4, containing 0.05% Tween 20 and 0.5% BSA) is added.

Substrate: o-Phenylenediamine dihydrochloride (OPD, Product No. P 8287), 0.4 mg/ml in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate (Phosphate-Citrate Buffer Capsules with Sodium Perborate are available as Product No. P 4922).

The product is provided with a specific antibody content of 0.1-2.0 mg/ml (prior to the addition of BSA).

Storage

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 is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

PCS 8/00