Product No. B-8520
Lot 066H4817

Anti-Mouse IgG (whole molecule) Biotin Conjugate

Antibody developed in Rabbit
IgG Fraction of Antiserum

Antiserum is developed in rabbit using purified mouse IgG as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other rabbit serum proteins. Rabbit anti-mouse IgG is conjugated to biotin ϵ-amino caproic acid-N-hydroxysuccinimide ester by covalent attachment. The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, with 0.1% sodium azide (see MSDS)* as a preservative.

Specificity

Specificity of the Biotin Conjugated Anti-Mouse IgG is determined by immunoelectrophoresis versus mouse serum and mouse IgG.

Identity and Purity

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

Immunoglobulin Content: 17.5 mg/ml

Titer: 1:100,000 (Direct ELISA)

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 (Voller, et al., and Guedson et al.).[1,2] Microtiter plates are coated with purified mouse IgG at a concentration of 1µg/ml in 0.05 M carbonate/bicarbonate buffer pH 9.6 (Carbonate/Bicarbonate Buffer Capsules are available as Sigma Product No. C-3041). Following incubation with the biotinylated antibody a 2 µg/ml solution of ExtrAvidin®-Peroxidase (Sigma Product No. E-2886) is added.

Substrate: *o*-Phenylenediamine Dihydrochloride (OPD, Sigma 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 Sigma Product No. P-4922).

Working Dilutions

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.

Storage

For continuous use, store at 2-8°C. 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.

References

1. Voller, A., et al., Bulletin WHO, **53**, 55 (1976).
2. Guedson, J., et al., J. Histochem. and Cytochem., **27**, 1131 (1979).

*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.