SIGMA-ALDRICH®

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Product Information

Anti-Goat IgG (whole molecule)-Biotin

antibody produced in rabbit, affinity isolated antibody

Catalog Number B7014

Product Description

Antiserum is developed in rabbit using purified goat IgG as the immunogen. Affinity isolated antigen specific antibody is obtained from anti-goat IgG antiserum by immunospecific purification which removes essentially all rabbit serum proteins, including immunoglobulins, that do not specifically bind to goat IgG. Anti-Goat IgG is conjugated to N-hydroxysuccinimidobiotin, Catalog Number H1759, by a modification of the method of Bayer, et al.¹

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.

Reagent

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

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

Store at -20 °C. For continuous use, the antibody may be stored at 2-8 °C for up to one month. For extended storage, the solution should be frozen in working aliquots at -20 °C. 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

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

Working Dilution: minimum 1:20,000

Working dilution is defined as the dilution of conjugate that gives a change in absorbance of 1.0 at 492 nm after 30 minutes of substrate conversion at 25 °C. 2,3

Microtiter plates are coated purified goat IgG at a concentration of 200 ng/ml in 0.05 M carbonatebicarbonate buffer, pH 9.6, Carbonate-Bicarbonate Buffer capsules are available as Catalog Number C3041.

Following incubation with the biotinylated antibody, a solution of Avidin-Peroxidase, Catalog Number A3151, 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), 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.

References

- 1. Bayer, E., et al., *Methods in Enzymology*, **62**, 308 (1979).
- 2. Voller, A., et al., *Bull. World Health Organ.*, **53**, 55 (1976).
- Guedson, J., et al., *J. Histochem. and Cytochem.*, 27, 1131 (1979).

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