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ProductInformation

ANTI-GOAT IgG (WHOLE MOLECULE)
BIOTIN CONJUGATE
Antibody Developed in Rabbit
Affinity Isolated Antigen Specific Antibody

Product Number **B 7024**

Product Description

Anti-goat IgG is developed in rabbit using purified goat IgG as the immunogen. Affinity isolated antigen specific antibody is obtained from rabbit anti-goat IgG antiserum by immunospecific purification which removes essentially all rabbit serum proteins, including immunoglobulins, that do not specifically bind to goat IgG. The antibody preparation is solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Rabbit anti-goat 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-goat IgG is determined by Enzyme Linked Immunosorbent Assay (ELISA). Cross reactivity of the antibody-conjugate is determined by ELISA. The conjugate shows no reactivity with human serum proteins.

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.

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.

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 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.

Product Profile

Working Dilution: 1:20,000 (minimum)
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 carbonate/-bicarbonate buffer pH 9.6 (Carbonate/Bicarbonate Buffer capsules are available as Product No. C 3041). Following incubation with the biotinylated antibody, a solution of 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: 0.04% *o*-Phenylenediamine Dihydrochloride** (OPD, Product No. P 8412), and 0.012% Hydrogen Peroxide** (H_2O_2, Product No. H 1009) in phosphate-citrate buffer, pH 5.0 [25.7 ml 0.2 M Dibasic Sodium Phosphate (Product No. S 0876), 24.3 ml 0.1 M Citric Acid (Product No. C 7129) and 50 ml deionized water].
**Add immediately before use.

References

1. Bayer, E. A., et al., Methods Enzymol., **62**, 308 (1979).
2. Voller, A., et al., Bull. World Health Org., **53**, 55 (1976).
3. Guedson, J. L., et al., J. Histochem. and Cytochem., **27**, 1131 (1979).

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