

Product Information

**ANTI-RAT IgG (WHOLE MOLECULE)
BIOTIN CONJUGATE**
Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody

Product No. **B 7139**

Product Description

Antiserum is developed in goat using purified rat IgG as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-rat IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, that do not specifically bind to bovine IgG. Goat anti-rat IgG is conjugated to Sigma N-Hydroxysuccinimidobiotin (Product No. 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-goat IgG and anti-goat 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

Product Profile

The product is provided with a specific antibody content of 0.1-1.0 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 (Voller, et

al. and Guedson et al.).^{2,3} Microtiter plates are coated purified rat 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** (H₂O₂, 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.

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.

References

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

Pcs12/00