

## Product Information

### **ANTI-RABBIT IgG (WHOLE MOLECULE) BIOTIN CONJUGATE**

Affinity Isolated Antigen Specific Antibody  
Adsorbed with Human IgG

Product No. **B 8895**

#### **Product Description**

Antiserum is developed in goat using purified rabbit IgG as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-rabbit IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, that do not specifically bind to rabbit IgG. The antibody preparation is solid phase adsorbed with human IgG to ensure minimal cross reactivity in tissue or cell preparations. Goat anti-rabbit IgG is conjugated to biotin-N-hydroxysuccinimide ester.

Specificity of the anti-rabbit IgG antibodies is determined by immunoelectrophoresis (IEP) versus normal rabbit serum and rabbit IgG. Cross-reactivity of the antibody preparation is determined by Ouchterlony Double Diffusion (ODD). The antibody shows no reactivity with human IgG.

Identity and purity of the antibody is established by immunoelectrophoresis, 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.

Avidin, Streptavidin or ExtrAvidin<sup>®</sup> show strong affinity interaction with biotin rendering the biotin-avidin system an extremely effective tool in molecular biology, protein chemistry and immunology. Because of the high specificity of the biotinylated antibody to rabbit IgG, the stability of the biotin-avidin complex and the availability of a variety of reagents (Avidin, Streptavidin or ExtrAvidin<sup>®</sup> conjugated to FITC, TRITC, Peroxidase or Alkaline Phosphatase), the detection and quantitation of rabbit IgG can be easily accomplished. The product may be used as a reagent in immunohistologic studies, offering sensitive and specific activity for rabbit IgG (whole molecule) without cross reactivity to human IgG. Because of the minimal interspecies cross reactivity to human IgG this product is excellent for use in enzyme immunoassays or dot blotting in the presence of human IgG.

#### **Reagents**

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 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.

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet U.S.D.A. requirements.

#### **Product Profile**

1. ELISA
  - a. A minimum dilution of 1:200,000 gives an absorbance of at least 1.0 at 450 nm using rabbit IgG at 1 µg/ml as coat and ExtrAvidin-Peroxidase (Product No. E 2886) at 2 µg/ml as the label.
2. Dot Blot
  - a. A dilution of at least 1:50,000 was determined in a direct assay using 20 ng of rabbit IgG/dot and ExtrAvidin-Peroxidase (Product No. E 2886) at 2 µg/ml as the label.
  - b. A dilution of at least 1:80,000 was determined in an indirect assay using 20 ng of human IgG/dot, Rabbit Anti-Human IgG (Product No. I 8635) as the primary antibody and ExtrAvidin-Peroxidase (Product No. E 2886) at 2 µg/ml as the label.
  - c. In an indirect chemiluminescence system using 10 ng human IgG/dot, Rabbit Anti-Human IgG (Product No. I 8635) as the primary antibody and ExtrAvidin-Peroxidase (Product No. E 2886) at 2 µg/ml as the label, this product was determined to have a dilution of at least 1:400,000 when used as secondary antibody. Luminol plus enhancer was used as substrate.

3. Immunohistology

A dilution of at least 1:800 was determined by indirect staining on formalin-fixed, paraffin-embedded human tonsil sections using Rabbit Anti-Human IgG (Product No. I 8635) at 1:100 as the primary antibody and ExtrAvidin-FITC (Product No. E 2761) as the label.

In order to obtain best results, it is recommended that each individual user determine their optimum working dilution by titration assay.

**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. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).
2. Guedson, J.L., et al., J. Histochem. and Cytochem., **27**, 1131 (1979).

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