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Product Information

Anti-Rabbit IgG (whole molecule)–Gold
produced in goat, affinity isolated antibody
adsorbed with human serum proteins

Catalog Number **G3779**

Product Description

Anti-Rabbit IgG (whole molecule) is produced in goat using rabbit IgG purified from normal rabbit serum as the immunogen. The antibody is isolated by immunospecific methods of purification to remove essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to rabbit IgG. To minimize cross reactivity with human proteins, the antibody preparation is solid phase adsorbed with human serum proteins, prior to conjugation. The affinity isolated antibody is conjugated to 10 nm gold particles via passive adsorption by a modification of the method of Geoghegan,[1] the excess antibody is then removed.

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

Binding activity is determined using a modified dot blot assay.[2] In this assay, a 1 mg/mL solution of rabbit IgG is serially diluted in phosphate buffered saline, 1 µl of each dilution is then applied to nitrocellulose paper. Binding activity is defined as the minimum amount of rabbit IgG detectable as a visible pink-red spot after a 1 hour incubation with the gold conjugate diluted to an A_{520} of 0.25.

Reagent

Supplied as a colloidal suspension in 0.02 M Tris buffered saline, pH 8.2, with 30% glycerol (v/v), 1% bovine serum albumin (w/v), and 15 mM sodium azide.

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/Stability

Store at 2-8 °C. **Do Not Freeze**.

General Guidelines for Usage

The conjugate should be diluted for most applications, using 0.5 M NaCl, buffered at pH 6 to 8, containing 0.1% BSA, 0.05% TWEEN® 20, and 5% fetal bovine serum to minimize background staining. For any given application, the optimum concentration of the conjugate must be determined experimentally. For most applications, the final A_{520} may range from 1.0 to 0.05 (1:5-1:100 dilution) with incubation times in the range of 30 minutes to 12 hours.[4]

References

1. Geoghegan, W.D., et al., *Immuno. Commun.*, **7**, 1 (1978).
2. Brada, D., and Roth, J., *Anal. Biochem.*, **142**, 79 (1984).
3. Ackerman, G.A., et al., *J. Histochem. Cytochem.*, **31**, 433 (1983).
4. Hsu, Y-H., *Anal Biochem.*, **142**, 221 (1984).

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