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Product Information

Anti-Rat IgG (whole molecule)–Gold
10 nm colloidal gold
produced in goat, affinity isolated antibody adsorbed with human serum proteins

Catalog Number **G7035**
Storage Temperature 2-8 °C

Product Description

Anti-Rat IgG (whole molecule) is produced in goat using as immunogen rat IgG purified from normal rat serum. The antibody is isolated by immunospecific methods of purification to remove essentially all goat serum proteins, including immunoglobulins which do not specifically bind to rat IgG. The antibody preparation is solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. The adsorbed affinity isolated antibody is then conjugated to 10 nm gold particles and excess antibody is removed.

Specificity for rat IgG is determined by Dot Blot Assay (DBA) using purified rat IgG and human serum. No reactivity with human serum proteins is observed.

Reagent

Supplied as a colloidal suspension in 0.02 M Tris buffered saline, pH 8.2, with 1% (w/v) BSA, 30% (v/v) glycerol 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.

Preparation Instructions

The conjugate should be diluted for most applications, using 0.5 M NaCl, buffered at pH 6-8, 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.[1]

Storage

Store at 2-8 °C

Product Profile

Binding activity is determined using a modification of the dot blot assay of Brada and Roth.[2] In this assay a 1 mg/mL solution of rat 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 rat 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.

Mean Particle Diameter, Standard Deviation and Coefficient of Variation will be stated on the Certificate of Analysis for each lot.

References

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

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