

## Product Information

### Anti-Human IgG ( $\gamma$ -chain specific)-Gold

5 nm colloidal gold, produced in goat, affinity isolated antibody, adsorbed with mouse serum proteins

Catalog Number **G0786**

#### Product Description

Anti-Human IgG ( $\gamma$ -chain specific) is produced in goat using human IgG purified from normal human 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 the  $\gamma$ -chain of human IgG. The antibody preparation is solid phase adsorbed with mouse serum proteins to ensure minimal cross reactivity in tissue or cell preparations. The adsorbed affinity isolated antibody is then conjugated to 5 nm gold particles and excess antibody is removed.

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

#### Reagents

Supplied as a colloidal suspension in 0.02 M Tris buffered saline, pH 8.2, with 1% BSA and 30% glycerol as stabilizers, containing 15 mM sodium azide as a preservative.

#### 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 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.<sup>3</sup>

#### Storage/Stability

Store at 2-8 °C.

#### Product Profile

Binding activity is determined using a modification of the dot blot assay.<sup>1</sup> In this assay a 1 mg/ml solution of human IgG is serially diluted in phosphate buffered saline, 1  $\mu$ L of each dilution is then applied to nitrocellulose paper. Binding activity is defined as the minimum amount of human 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.

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#### References

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

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