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Product Information

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

Catalog Number **G7777**

Product Description

Antiserum is produced in goat using mouse IgG purified from normal mouse 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 mouse 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.

Reagent

The conjugate is suspended in 0.02 M Tris buffered saline, pH 8.2, containing 1% (w/v) BSA, 20% (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.

Storage

Store at 2-8 °C. Do not freeze.

Binding Activity

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

Clustering data

Relative order of singlets, doublets,triplets or greater: Singlets>Doublets>Triplets. Clustering data determined by floating the electron microscopy (EM) nickel grid on conjuate diluted 1:100 in Tris buffer, pH 8.0, containing 1% BSA, for 30-60 minutes. The grid is evaluated by EM after drying. One hundred particles are scanned to determine clustering.

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.[3]

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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