sigma-aldrich.com

3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-Goat IgG (whole molecule)–Gold

produced in rabbit, affinity isolated antibody

Catalog Number G5402

Product Description

Anti-Goat IgG (whole molecule) is produced in rabbit using as immunogen goat IgG purified from normal goat serum. The antibody is isolated by immunospecific methods of purification to remove essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to goat IgG. The affinity isolated antibody is conjugated to 10 nm gold particles and excess antibody is removed.

Specificity of the antibody is established by Dot Blot Assay (DBA), using purified goat IgG.

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 goat IgG is serially diluted in phosphate buffered saline, 1 μ L of each dilution is then applied to nitrocellulose paper. Binding activity is defined as the minimum amount of goat IgG detectable as a visible pink-red spot after a 1 hour incubation with the gold conjugate diluted to an A₅₂₀ 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.³

References

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

TWEEN is a registered trademark of Croda International PLC

DXP,PHC 03/08-1

Sigma brand products are sold through Sigma-Aldrich, Inc.

Sigma-Aldrich, Inc. warrants that its products conform to the information contained in this and other Sigma-Aldrich publications. Purchaser must determine the suitability of the product(s) for their particular use. Additional terms and conditions may apply. Please see reverse side of the invoice or packing slip.