PROTEIN A-10 NM COLLOIDAL GOLD LABELED
Product Number **P 1039**

ProductInformation

Preparation Instructions
Product should be diluted for most applications. It is recommended that diluent buffer contain 0.15 M saline buffered at pH 6 to 8, plus 0.5% albumin (A 7638) and 0.05% Tween 20 to minimize background (additional buffer supplement may be required for certain applications e.g., see "dot blot" diluent). It is also recommended that, prior to application, the diluted conjugate be allowed to equilibrate at least 20 minutes in lower glycerol content. Optimum concentration of the conjugate must be determined empirically dependent on specific usage and generally may range from final A_{520} = 1.0 to 0.05 (1:5 – 1:100 dilution) with incubation times ranging from 30 minutes to 12 hours.

Storage/Stability
This undiluted product may be stored for extended periods at –20 °C. Diluted samples should not be stored below 0 °C as freezing may cause aggregation of the colloid.

Results
Binding is evaluated by a "dot blot" assay modified from the method of Brada and Roth.[2] Serial dilutions are prepared from a 1 mg/ml positive control protein solution. One micro-liter (1 µl) of each solution is adsorbed onto a nitrocellulose membrane and allowed to dry. The gold conjugate is diluted to A_{520} = 0.25 (approx. 1:20) with 0.15 M NaCl, 0.01 M sodium phosphate, pH 7.0, 5 mg/ml albumin and 0.05% Tween 20. The spotted membranes are incubated with the gold for 1 hour at 25 °C. The detection limit is the minimum amount of protein that can be detected as a pink-red spot on the membrane.

References

1. Ackerman, G.A., *et al.,* J. Histochem. Cytochem., **31**, 433 (1983).
2. Brada, D. and Roth, J. Anal. Biochem., **142**, 70 (1984).
3. Bendayan, M., J. Electron Microscopy Technique, **1**, 243 (1984).
4. Bendayan, M., J. Histochem. Cytochem., **30**, 81 (1981).

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