3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

STREPTAVIDIN 10 NM COLLOIDAL GOLD LABELED

Product Number **S 9059**

Preparation Instructions

This product should be diluted for most applications. It is recommended that the diluent buffer contain 0.15 M saline buffered at pH 6 to 8, with 0.5% albumin (Product No. 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 (1:2.5-1:50 dilution) with incubation times ranging from 30 minutes to 12 hours.

Storage/Stability

Product may be stored for extended periods as packaged (undiluted) at 2-8 °C. Diluted samples should not be stored below 0 °C as freezing may cause aggregation of the colloid.

Results

Detects up to 30 ng of Albumin-Biotin (Product No. A 6043)

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 microliter (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. 1:10) 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**, 79 (1984)
3. Liesi, P., et al., J. Histochem. Cytochem., **34**, 923 (1986)
4. Bonnard, C., et al., Immunolabeling for Electron Microscopy, J. M. Polak and I. M. Varndell, Eds., Elsevier, New York, NY, pp 95-111 (1984)

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