



LECTIN FROM CANAVALLIA ENSIFORMIS
10 nm Colloidal Gold Labeled

Product Number **L5021**

Lot Number 030K3785

Partial Size Distribution by transmission electron

microscopy (n = 100)

Mean Particle Diameter 9.9nm

Standard Deviation ±0.41

Coefficient of Variation 4.1%

Protein Concentration

µg per ml 25.9

Spectrophotometric Data (1 cm light path, H₂O as blank)

A₅₂₀ 5.2

Binding Activity^{1,2}

Detects 6ng thyroglobulin.

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 absorbed onto a nitrocellulose membrane and allowed to dry. The gold conjugate is diluted to A₅₂₀ = 0.25 (approx. 1:20) with Tris buffered saline (50 mM Tris-HCl, 150 mM NaCl) + 0.1% Tween 20, pH 8.0. The spotted membranes are incubated with the gold for 1 h at 25 °C. The detection limit is the minimum amount of

Product Information

protein that can be detected as a pink-red spot on the membrane.

Preparation Instructions

Product should be diluted for most applications. It is recommended that diluent buffer contain Tris buffered saline + 0.1% Tween 20, pH 6-8 to minimize background. Optimum concentration of the conjugate must be determined empirically dependent on specific usage and generally may range from final A₅₂₀ = 1.0 to 0.05 (1:5-1:100 dilution) with incubation times ranging from 30 min to 12 h.

Suggested review: Roth, J., Techniques in Immunocytochemistry, Vol. 2, G.R. Bullock and P. Petrusz, Eds., Academic Press, New York, pp. 217-284 (1983). (Sigma Prod. T7400)

Storage/Stability

Product may be stored for extended periods as packaged (undiluted) at 2-8 °C. Do not freeze.

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. Benhamou, N. and Ouellette, G. B., J. Histochem. **34**, 855 (1983)

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.