



DEXTRAN BLUE COPRECIPIANT

Product Number **D6934**
Store at room temperature

Precipitating nucleic acids at very low concentrations can be a challenging task in molecular biology. Sigma's Dextran Blue coprecipitant solves the problem of invisible pellets by coloring the pellet while at the same time effectively coprecipitating low concentrations of DNA.

Product Description

10 mg/ml in 1 mM EDTA
DNase, RNase and nickase: None detected

Precautions and Disclaimer

Sigma's Dextran Blue coprecipitant is for laboratory use only. Not for drug, household, or other uses.

Procedure

Note: This procedure has been shown to work well for precipitating >95% of 200 ng DNA which has an initial concentration of 0.5 µg/ml.

In a microcentrifuge tube, add 1/40 volume of Dextran Blue coprecipitant to 1 volume of dilute nucleic acid solution. Add 1/10 volume of 3 M sodium acetate and 2.5 volumes of ethanol. Invert to mix and incubate at -20°C for 30 minutes. Centrifuge at maximum speed (approx. 14,000 rpm) in a microcentrifuge for 15 minutes at 4°C. Remove supernatant. Wash the blue pellet with 1 volume of 70% ethanol by gently inverting tube. Again centrifuge at maximum speed (approx. 14,000 rpm) in a microcentrifuge for 15 minutes at 4°C. Dry pellet and resuspend in an appropriate volume of water or buffer. The resulting solution will be blue. When the DNA is subsequently analyzed by electrophoresis, the dextran blue will remain in the gel well due to the high molecular weight (avg. 2,000,000) of the dextran polymer. The isolated DNA will run as expected.

Product Information

The use of Dextran Blue as a coprecipitant does not inhibit downstream applications such as ligation and bacterial transformation even at concentrations which are higher than those necessary to precipitate and visualize DNA. PCR reactions are reported to be inhibited in a dose-dependent manner at concentrations of Dextran Blue above 125 µg/ml¹.

References

1. Matysiak-Scholze, U., *et al.*, Elsevier Trends Journals Technical Tips Online, T40011 (1996)

Related Products

3M Sodium Acetate, Product No. S2404
Absolute ethanol, Product No. 45,984-4

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