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Product Information

AMMONIUM ACETATE, 7.5 M SOLUTION Molecular Biology Reagent

Product No. **A 2706**
Store at 2-8 °C

Product Description

Concentration: 7.3-7.7 M by specific ion electrode
DNase and RNase: None detected
Suitable for use in DNA precipitation.

Endonuclease-exonuclease

One µg of λ Hind III fragments was incubated for 16 hours at 37 °C with ammonium acetate at a final concentration of 0.3 M in a 50 µl reaction mixture containing 30 mM Trizma®-HCl, pH 7.8, 50 mM NaCl and 10 mM MgCl₂. No degradation of the DNA fragments was detected by agarose gel electrophoresis. Detection limit: Degradation of 10% of the DNA substrate is detectable.

Endonuclease (Nickase)

One µg of pBR322 DNA was incubated with ammonium acetate at a final concentration of 0.3 M in a 50 µl reaction mixture containing 30 mM Trizma®-HCl, pH 7.8, 50 mM NaCl and 10 mM MgCl₂ for 16 hours at 37 °C. No conversion of the covalently closed circular DNA to the nicked or linear form was observed by agarose gel electrophoresis. Detection limit: Conversion of 1% of the DNA substrate is detectable.

RNase

Two µg of transfer RNA were incubated with ammonium acetate at a final concentration of 0.3 M in a 50 µl reaction mixture containing 30 mM Trizma®-HCl, pH 7.8, 50 mM NaCl and 10 mM MgCl₂ for 16 hours at 37 °C. No degradation of the tRNA was detected by polyacrylamide gel electrophoresis. Detection limit: Degradation of 10% of the tRNA substrate is detectable.

Suitability for DNA Precipitation

13.3 µl of 7.5 M ammonium acetate and 1 µg of either λ DNA Hind III digest or pBR322 DNA was brought a final volume of 50 µl with water. 125 µl (2.5 volumes) of absolute ethanol was added and the resulting solution was incubated 1 hour at -20 °C. After centrifugation at 15000 x g for 15 minutes, the supernatant was aspirated and the DNA pellet was air dried and resuspended in 50 µl water. Based on analysis using agarose gel electrophoresis there was no significant loss (>90% recovery) or detectable degradation of either DNA.

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