Linear Polyacrylamide (LPA) (5mg/ml)

High quality synthetic carrier solution for precipitation of DNA/RNA

Catalog Number: B315-01, B315-02, B315-03

Product Introduction

Linear Polyacrylamide (LPA) is an inert coprecipitate used to aid recovery of nucleic acids during alcohol precipitations, essential for quantitative recovery of small amounts of nucleic acids in dilute solutions. Relative to other carriers, such as tRNA or glycogen, LPA offers several advantages for recovering DNA or studying DNA-protein interactions. Linear polyacrylamide eliminates the risk of trace contaminants being introduced to the precipitation process because it is chemically synthesized and rigorously tested for nuclease contamination. There is no contamination from biological materials. Linear polyacrylamide does not inhibit enzymatic reactions, but also does not interfere with spectrophotometric readings at 260nm and 280nm. These distinct advantages make linear acrylamide the best choice for precipitating DNA and RNA for amplification reactions.

Features

- Quantitative recovery of low concentrations (ng/ml) of nucleic acid
- Prevents pellet loss in nuclease protection assays.
- Precipitate DNA fragments > 15 base pairs.

Applications

- For DNA/RNA precipitation,
- Coprecipitate
- PCR amplification
- Ligation
- Other applications where high purity and recovery are essential.

Reagents Supplied

Product Number	B315-01	B315-02	B315-03
Linear Polyacrylamide solution (5mg/ml)	1 ml	5 ml	25 ml

Storage and Stability

Linear Polyacrylamide (LPA) Solution is shipped at ambient temperature and is stable for at least 24 months from the date of purchase when stored at 2-8°C.

Product Notes

Linear Polyacrylamide should be used at a final working concentration of 10–20µg/ml.

For precipitation of restricted DNA fragments, PCR products, or RNA, adjust the monovalent cation concentration of the solution (for example to 0.5 M ammonium acetate). Add linear polyacrylamide to a final concentration of 10–20µg/ml, mix well, then add one volume of 100% isopropanol or two volumes of 100% ethanol. Chill at least 15 min at –20°C, centrifuge for ≥15 minutes at ≥10,000 x g. Carefully remove the supernatant fluid and resuspend the pellet in an appropriate buffer.

For precipitation of oligonucleotides, follow the same procedure, using ethanol instead of isopropanol for best recovery. Wash with 80% ethanol to remove excess salt.

Quality Control

The Certificate of Analysis provides detailed quality control information for each product. Certificates of Analysis are available on our website. Go to www.amdbiotech.com and search for the Certificate of Analysis by product lot number, which is printed on the box.

Disclaimers and Safety Information

This kit is designed for research use only. All biological samples are considered potentially infectious. When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets (MSDSs). MSDS can be downloaded from the "Product Documents" tab when viewing the product kit. Download MSDS at www.amdbiotech.com. Information in this document is subject to change without notice.