The advent of automated DNA sequencing and advances in genetic technology have brought a requirement for increased yields of ever more highly purified preparations of plasmid DNA. The Quantum Prep Plasmid Miniprep kit was developed to meet the stringent purity requirements of the DNA sequencer, while providing optimal yields of plasmid for gene transfer and cloning protocols. The key to the Quantum Prep matrix’s consistently high purity yields lies in the unique Quantum Prep matrix: the highly-porous siliceous exoskeleton of the remains of prehistoric diatoms. Proprietary treatments produce a matrix with ideal DNA binding and purification characteristics.

**Higher Yields**

The unique 3-D structure of the diatom exoskeleton provides the greatest number of DNA binding sites available, so you are able to use enriched growth media such as Terrific Broth to obtain the highest yields on the market. Anion exchange and embedded silica resins don’t come close to this kind of performance. The Quantum Prep plasmid miniprep kit is recommended for both high and low copy number plasmids.

**Longer, More Accurate Sequencing Reads**

To guarantee the highest quality DNA, each lot of Quantum Prep Plasmid Miniprep kits must pass stringent QC specifications (see table at right). This ensures that your DNA is suitable for the most demanding applications, including fluorescent sequencing, transfection and transformation protocols, in vitro transcription reactions, PCR* and subcloning experiments.
The Quantum Prep Plasmid Miniprep kit has the lowest cost per microgram of purified DNA of any kit available. The patented matrix is tested to yield at least 20 µg of high copy plasmid from just 1.5 ml of culture, at a price you can afford. Each kit includes enough material to process 100 1.5 ml overnight cultures.

15-Minute Procedure
The Quantum Prep Plasmid Miniprep procedure takes less than 15 minutes from cell culture to purified plasmid. DNA is recovered in H2O or TE for immediate use in sequencing, transfection, PCR, subcloning, and other protocols requiring highly purified DNA. Ready-to-use reagents do not require mixing or dilution; phenol extraction, CsCl2, and ethanol precipitation are eliminated.

Specifications
- **PURITY**: >98% accuracy over 600 bases on ABI fluorescent sequencer
- **TIME**: 15 minutes, including cell lysis
- **PLASMID YIELD**: >20 µg (high copy plasmids)
- **GROWTH MEDIA**: LB & TB overnight cultures
- **CULTURE VOLUME**: 1-5 ml high-copy plasmids; 1-10 ml low-copy plasmids
- **METHOD**: Spin column/microcentrifuge

* The Polymerase Chain Reaction (PCR) process is covered by patents owned by Hoffman-LaRoche. Use of the PCR process requires a license.

**Ordering Information**
- **Catalog #**
  - 732-6100 Quantum Prep Plasmid Miniprep Kit, 100 preps, includes 20 ml cell resuspension solution, 25 ml cell lysis solution, 25 ml neutralization solution, 20 ml Quantum Prep matrix, 63 ml wash buffer, 100 spin filters, instructions
  - 732-6120 Quantum Prep Plasmid Midiprep Kit, 20 preps
  - 732-6130 Quantum Prep Plasmid Maxiprep Kit, 10 preps
- **REPLACEMENT ACCESSORIES**
  - 732-6110 Quantum Prep Matrix, 20 ml
  - 732-6115 Quantum Prep Neutralization Solution, 25 ml
  - 732-6122 Quantum Prep Neutralization Solution, 125 ml
  - 732-6027 Quantum Prep Mini Spin Filters, 100
  - 732-6116 Quantum Prep Midi Spin Columns, 20
  - 732-6137 Quantum Prep Midi Spin Baskets, 10

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