ReadiPrep™ Plasmid Preparation Mini Kit

Catalog number: 67307
Unit size: 10 Preps

Component	Storage	Amount (Cat No. 67307)
Component A: ReadiPrep™ Resuspension Buffer (RB1)	Refrigerated (2-8 °C)	1 bottle (5 mL)
Component B: RNAse	Freeze (< -15 °C)	1 vial (250 µL)
Component C: ReadiPrep™ Spin Column	Room temperature (10-25 °C)	10 columns
Component D: ReadiPrep™ Lysis Buffer (LB1)	Refrigerated (2-8 °C)	1 bottle (5 mL)
Component E: ReadiPrep™ Neutralization Buffer (NB1)	Refrigerated (2-8 °C)	1 bottle (5 mL)
Component F: ReadiPrep™ Binding Buffer (BB1)	Refrigerated (2-8 °C)	1 bottle (5 mL)
Component G: ReadiPrep™ Wash Buffer (WB1)	Refrigerated (2-8 °C)	1 bottle (2.5 mL)
Component H: ReadiPrep™ Elution Buffer (EB1)	Refrigerated (2-8 °C)	1 bottle (5 mL)

OVERVIEW

The ReadiPrep™ Plasmid Preparation Mini Kit is a high-performance solution for plasmid DNA extraction from bacterial cultures. It is ideal for molecular biology labs needing fast, reliable, and consistent plasmid mini preps. This kit combines alkaline lysis with advanced silica membrane technology to purify plasmid DNA with good yield and purity.
Each spin column binds plasmid DNA efficiently, minimizing carryover of RNA and genomic DNA. The entire process takes less than 30 minutes, with pre-formulated buffers and a streamlined workflow that saves time and reduces error. The purified DNA is ready for downstream applications including cloning, DNA sequencing, PCR and transfection.

AT A GLANCE

1. Resuspend the bacterial pellet in resuspension buffer.
2. Add equal volume of lysis buffer, mix gently, followed by addition of neutralization buffer and centrifuge to pellet out the debris.
3. Load the supernatant onto the column, spin and discard the flow through.
4. Wash the column with binding buffer followed by wash buffer.
5. Elute the plasmid in elution buffer.

PREPARATION OF WORKING SOLUTION

ReadiPrep™ Wash Buffer (WB1) working solution

Prepare ReadiPrep™ Wash Buffer (WB1) working solution by adding 10 mL of Ethanol (96-100%, not provided) into the ReadiPrep™ Wash Buffer (WB1) (Component G).

ReadiPrep™ Resuspension Buffer (RB1) working solution

Prepare ReadiPrep™ Resuspension Buffer (RB1) working solution by adding whole vial of RNAse (Component B) into the ReadiPrep™ Resuspension Buffer (RB1) (Component A).
Note: After addition of RNAse, ReadiPrep™ Resuspension Buffer (RB1) working solution must be stored at 4 °C.

SAMPLE EXPERIMENTAL PROTOCOL

The protocol is designed for the purification of plasmid DNA from 1 to 5 mL of overnight culture.

1. Resuspend the bacterial pellet in 250 µL of ReadiPrep™ Resuspension Buffer (RB1) working solution.
2. Add 250 µL of ReadiPrep™ Lysis Buffer (LB1) (Component D) and mix thoroughly by inverting the tube 5-6 times.
   Note: Do not vortex. Do not allow the lysis reaction to proceed for more than 5 minutes.
3. Add 350 µL of ReadiPrep™ Neutralization Buffer (NB1) (Component E) and mix immediately and thoroughly by inverting the tube 4-6 times.
4. Centrifuge for 10 mins at 13,000 rpm in a table-top centrifuge.
5. Add 800 µL of the supernatant to the ReadiPrep™ Spin Column (Component C). Centrifuge at 13,000 rpm at room temperature for 1 min. Discard the flow-through.
6. Add 800 µL of the supernatant to the ReadiPrep™ Spin Column (Component C). Centrifuge at 13,000 rpm at room temperature for 1 min. Discard the flow-through.
7. Wash the column by adding 750 µL of ReadiPrep™ Washing Buffer working solution (WB1). Centrifuge at 13,000 rpm at room temperature for 1 min. Discard the flow-through.
8. Perform one more round of centrifuge at 13,000 rpm at room temperature for 1 min to remove the residual wash buffer from the columns.
9. Place the column in a clean 1.5 mL micro centrifuge tube (Not provided). Add 50 µL of ReadiPrep™ Elution Buffer (EB1) to the center of the column, incubate for 1 min and centrifuge at 13,000 rpm for 1 min.

EXAMPLE DATA ANALYSIS AND FIGURES

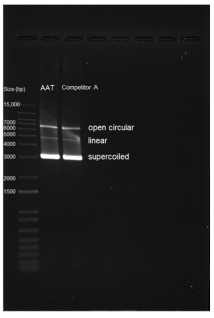

Figure 1. Comparison of plasmid purified with Competitor A's purification kit and ReadiPrep™ Plasmid Preparation Mini Kit (cat# 67307). E.coli (Strain DH10B) containing Gα16 plasmid (Size around 3000 bp) was purified using both kits as per suggested protocols. Purified products were run on 1% agarose gel with 1X TAE buffer followed by Gelite safe DNA gel staining (cat# 17700).

DISCLAIMER

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