

SPINeasy™ Plasmid Midiprep Kit

Cat. No.: 116539025 (25 PREPS) / 116539000 (2 PREPS)



Quick-Start Protocol

Revision Nov 2023



Scan QR code for more information
from instruction manual

Notes before starting:

- Briefly spin down **the vial of RNase A** and add the **entire solution** to **Resuspension Buffer SD1**. Mark the bottle and store **Resuspension Buffer SD1** with **RNase A** at 2-8 °C.
- Add **30 mL (3 mL for sample kit)** isopropanol to **Wash Buffer DW1** and mark the bottle.
- Add **100 mL (10 mL for sample kit)** absolute ethanol to **Wash Buffer DW2** and mark the bottle.
- Prepare two labelled 15 mL centrifuge tubes per prep: one for lysate binding preparation and another for elution of plasmid DNA.

Column preparation

1. Pipette **450 µL Equilibration Buffer** into **Column SD** with **collection tube**. Incubate for **1 min** at room temperature and centrifuge for **30 sec @ 14,000 g**. Discard flow through and reuse collection tube.
2. Keep the columns aside for later use.

Culture

3. Grow **25–50 mL** transformed bacteria culture by incubation at 37 °C overnight (approximately **16 hours**) with vigorous shaking at **180–250 rpm**.
4. Harvest the cells by centrifugation for **20 mins @ 3,000 g**. Discard the supernatant.

Lyse

5. Resuspend bacterial cell pellet in **2 mL Resuspension Buffer SD1**.
6. Add **2 mL Alkaline Lysis Buffer SD2** and mix well by gently inverting the tube several times. Do not vortex or pipette vigorously. Proceed to the next step **directly** or within **5 mins**.
7. Add **3 mL Neutralization Buffer SD3** and mix well by gently inverting **several times**. Do not vortex or pipette vigorously.
8. Centrifuge for **10 mins @ 15,000 g**.

Bind

9. Transfer lysate supernatant to a 15 mL centrifuge tube. Add **2 mL** ethanol to the lysate supernatant and mix by inverting the tube.
10. Load **3.5 mL** mixture onto a **Column SD** with collection tube.
11. Centrifuge for **2 min @ 5,000 g** or until all the fluid has passed through the column. Discard flow through and reuse collection tube.
12. Repeat Steps 10 and 11 until all lysate has been loaded.

Wash

13. Add **3.5 mL Wash Buffer DW1** to the column.
14. Centrifuge for **2 min @ 5,000 g** or until all the fluid has passed through the column. Discard flow through and reuse collection tube.
15. Add **3.5 mL Wash Buffer DW2** to the column.
16. Centrifuge for **2 min @ 5,000 g** or until all the fluid has passed through the column. Discard flow through and reuse collection tube.
17. Centrifuge for **an additional 10 mins @ 5,000 g** to dry column.
18. Air dry membrane by allowing the column to stand at room temperature for **3 mins**.

Elute

19. Remove collection tube and place column into a clean 15 mL centrifuge tube.
20. Add **500 µL Elution Buffer SD** to the center of the membrane. Incubate at room temperature for **3 mins**.
21. Centrifuge for **5 mins @ 5,000 g** to elute plasmid DNA. Transfer the eluted plasmid DNA into a clean 1.5 mL centrifuge tube for easier storage.

MP Biomedicals nucleic acid extraction kits are designed for simple, efficient, and rapid purification of DNA and RNA from various types of samples. Our wide range of instruments and reagent kits provide you a one-stop solution for your sample preparation works.



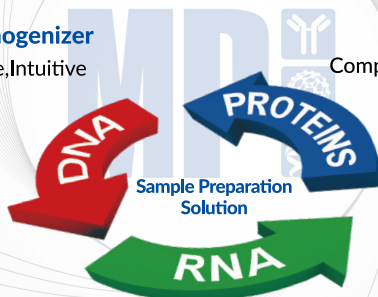
FastPrep® Homogenizer

Powerful, Flexible, Intuitive



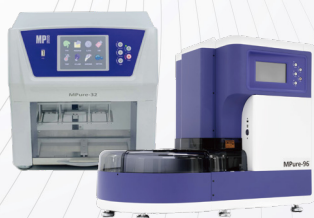
Lysing Matrix

Complete, Quantitative lysing method



MagBeads FastDNA / FastRNA Kits & SPINeasy™ Extraction Kits

Highly purified DNA / RNA / Protein



Automated Nucleic Acid Purification (aNAP) Instruments

MPure-96™ Process up to 96 samples

MPure-32™ Process up to 32 samples