

# QIAprep® Spin Miniprep Kit

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## Introduction

*Adapted by Jacob Mejlsted from Qiagen's [QIAprep® Spin Miniprep Kit](#)*

This protocol assumes using a centrifuge, and not vacuum manifold processing

## Materials

### › Buffers

- › P1 buffer
- › P2 buffer
- › N3 buffer
- › LyseBlue reagent
- › PB buffer
- › PE buffer
- › EB buffer

### › Tubes

- › Centrifuge tubes
- › 1.5 mL eppendorf tubes

## Procedure

### Quick-start protocol

1. Pellet 1–5 ml bacterial overnight culture by centrifugation at >8000 rpm (6800 x g) for 3 min at room temperature (15–25°C).
2. Resuspend pelleted bacterial cells in 250 µl Buffer P1 and transfer to a microcentrifuge tube.
3. Add 250 µl Buffer P2 and mix thoroughly by inverting the tube 4–6 times until the solution becomes clear. Do not allow the lysis reaction to proceed for more than 5 min. If using LyseBlue reagent, the solution will turn blue.
4. Add 350 µl Buffer N3 and mix immediately and thoroughly by inverting the tube 4–6 times. If using LyseBlue reagent, the solution will turn colorless.
5. Centrifuge for 10 min at 13,000 rpm (~17,900 x g) in a table-top microcentrifuge.
6. Apply 800 µl supernatant from step 5 to the QIAprep 2.0 spin column by pipetting. Centrifuge for 30–60 s and discard the flow-through
7. Recommended: Wash the QIAprep 2.0 spin column by adding 0.5 ml Buffer PB. Centrifuge for 30–60 s and discard the flow-through

8. Wash the QIAprep 2.0 spin column by adding 0.75 ml Buffer PE. Centrifuge for 30–60 s and discard the flow-through. Transfer the QIAprep 2.0 spin column to the collection tube.
9. Centrifuge for 1 min to remove residual wash buffer.
10. Place the QIAprep 2.0 column in a clean 1.5 ml microcentrifuge tube. To elute DNA, add 50 µl Buffer EB (10 mM TrisCl, pH 8.5) or water to the center of the QIAprep 2.0 spin column, let stand for 1 min, and centrifuge for 1 min.
11. If the extracted DNA is to be analyzed on a gel, add 1 volume of Loading Dye to 5 volumes of purified DNA. Mix the solution by pipetting up and down before loading the gel.