

Quick Start Guide

GenElute™ Blood Genomic DNA Miniprep Kit

NA2010, NA2020

Reagents to Prepare

- Dilute the Prewash Solution with 27.5 mL (70 prep) or 110 mL (350 prep) of 95-100% ethanol. After each use, tightly cap the diluted Prewash Solution to prevent ethanol evaporation.
- Dilute the Wash Solution with 80 mL (70 prep) or 360 mL (350 prep) of 95-100% ethanol. After each use, tightly cap the diluted Wash Solution to prevent ethanol evaporation.
- Dissolve Proteinase K in water to obtain a 20 mg/mL stock solution. This solution can be stored for several days at 2–8 °C. For longer-term storage, the unused portion of the solution may be stored in aliquots at –20 °C until needed.

Protocol

All spins at $\geq 12,000 \times g$.

Release DNA

1. Collect whole blood in anticoagulant tube (EDTA preferred).
2. Add 20 μL of Proteinase K to 1.5 mL Microcentrifuge Tube and add up to 200 μL whole blood sample. If sample is less than 200 μL , dilute using Resuspension Solution. Vortex to thoroughly mix.
3. Add 200 μL Lysis Solution C and vortex thoroughly to mix.
4. Incubate at 55° C for 10 min.
5. Add 200 μL of 95-100% ethanol to lysate and vortex thoroughly to mix.

Prepare Column

6. Assemble Column with 2 mL collection tube.
7. Add 500 μL Column Preparation Solution to column and spin for 1 min. Discard flowthrough.

Bind DNA to Column

8. Transfer the lysate into the prepared column. Spin 1 min. Discard collection tube with flowthrough and transfer the column to a fresh 2 mL collection tube..

Wash to Remove Contaminants

9. Add 500 μL Prewash Solution to column. Spin 1 min. Discard flowthrough.
10. Add 500 μL Wash Solution to column. Spin 3 min. Discard flowthrough.
11. Spin 1 min to dry column.

Elute Purified DNA

12. Transfer Column to new collection tube.
13. Add 200 μL Elution Solution to center of column. Spin 1 min.
14. An additional elution may be performed if desired to improve yield.

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