

Quick Start Guide

GenElute™ Bacterial Genomic DNA Kit

NA2100, NA2110, NA2120

Reagents to prepare:

- Dilute Wash Solution Concentrate with 10 mL (10 prep), 80 mL (70 prep) or 360 mL (350 prep) of 95-100% ethanol. After each use, tightly cap the diluted Wash Solution Concentrate to prevent ethanol evaporation.
- Prepare Lysozyme Solution (sold separately – L4919): Prepare 2.115×10^6 unit/mL Lysozyme Solution using the Gram-Positive Lysis Buffer as the diluent.
- 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.

NOTE: All spins at $\geq 12,000 \times g$

1. Harvest & Lyse Cells

- Pellet 1.5 mL of bacterial culture by spinning for 2 min.

For Gram-Negative Bacteria:

- Resuspend pellet in 180 µL Lysis Solution T.
- Add 20 µL Proteinase K solution to cell suspension. Vortex or pipet to mix. Incubate at 55 °C for 30 min.
- Add 200 µL Lysis Solution C, vortex or pipet to mix. Incubate at 55 °C for 10 min.

For Gram-Positive Bacteria:

- Resuspend pellet in 200 µL Lysozyme Solution and incubate at 37 °C for 30 min.
- Add 20 µL Proteinase K and 200 µL Lysis Solution C to cell suspension. Vortex or pipet to mix. Incubate at 55 °C for 30 min.

2. Prepare Column

- Add 500 µL of Column Preparation Solution to each Column with Collection Tube. Spin for 1 min and discard flowthrough.

3. Bind DNA to Column

- Add 200 µL ethanol to the lysed cells, vortex or invert to mix.
- Transfer EtOH mixture to Column and spin for 1 min.

4. Wash Column

- Transfer column to new Collection Tube and add 500 µL Wash Solution 1 to Column. Spin for 1 min and discard flowthrough.
- Add 500 µL Previously Diluted Wash Solution Concentrate to Column. Spin for 3 min to dry Column.

5. Elute DNA

- Transfer column to new Collection Tube and add 200 µL Elution Solution. Spin for 1 min. Repeat elution if desired.

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

Technical Assistance

Visit the tech service page on our web site at SigmaAldrich.com/techservice.

Standard Warranty

The applicable warranty for the products listed in this publication may be found at SigmaAldrich.com/terms.