

# BacterialSeq

## Sample Amounts and Concentrations

Sample	Shipping Condition	Amount / Concentration	Volume / Notes
Genomic DNA	Ambient Temperature	50 ng/μl	> 20 μl
Cells	Ambient Temperature	~4 * 10 <sup>9</sup> cells per ml NAP buffer	1 ml
Cells	Frozen	~ 4 * 10 <sup>9</sup> cells	or pellet from up to 10 ml of culture, if cell counts are not available

## Sample Requirements

- **Quantification method:** Use fluorescence-based methods (e.g., Qubit). Avoid absorbance-based methods (e.g., Nanodrop), which may overestimate concentration.
- **DNA quality:** Ensure high-molecular-weight DNA (>30 kb) with no significant fragmentation.
- **Compliance:** Samples not meeting requirements may face processing delays, and complete sequencing or coverage cannot be guaranteed.

### Note:

We accept bacteria pellets from pure liquid cultures for most species.

**Exclusions:** Mycobacteria and Staphylococcus.

For specialized offers or exceptions, please contact your sales representative.

## Sample Preparation

### A. Genomic DNA (Ambient Temperature)

- Dissolve your genomic DNA preferably in 10 mM Tris-HCl (pH 8) with 1–2 mM EDTA.

### B. Cells (Ambient Temperature)

1. Grow the cells to an OD600 of approximately 0.7, or ensure that they are in the exponential growth phase.
2. Harvest either 10 mL of culture, ~10<sup>8</sup> cells, or up to 50 mg of wet pellet.
3. Centrifuge the cells and wash the pellet twice with an appropriate buffer (e.g., PBS or TE).
4. Resuspend the cell pellet in 1 ml of NAP buffer.
5. Transfer the resuspended cells to a 2 ml snap-cap or screw-cap tube.

### C. Cells (Frozen)

1. Grow the cells to an OD600 of approximately 0.7, or ensure that they are in the exponential growth phase.
2. Harvest either 10 mL of culture, ~10<sup>8</sup> cells, or up to 50 mg of wet pellet.
3. Centrifuge the cells, wash the pellet twice with an appropriate buffer (e.g., PBS or TE) and transfer it to 2 ml snap-cap or screw-cap tube.
4. Send the pelleted cells only.

## Shipment Instructions

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### A. For Ambient Temperature Samples (Genomic DNA and Cells)

- Place the sample in a transparent plastic bag (one bag per order).
- If available, deposit the sample into the nearest Microsynth sample drop box.
- If no drop box is available, ship your samples in a padded envelope to:

Microsynth AG  
Department 3.2  
Schützenstrasse 15  
9436 Balgach  
Switzerland

### B. For Frozen Samples (Cells)

- Package your samples with dry ice in an insulating, gas-permeable container (e.g., Styrofoam with 2–3 cm walls).
- Dry Ice Requirements:
  - Estimate dry ice evaporation at 100 g per hour for a box size of 33×33×33 cm.
  - For 24-hour shipments, use at least 2.4 kg of dry ice (plus extra for safety).
- Ship early in the week to avoid weekend delays to:

Microsynth AG  
Isolation Department  
Schützenstrasse 15  
9436 Balgach  
Switzerland

## Order Form Completion for Tubes

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Prior to shipping your samples to Microsynth, please proceed as follows to complete your order form:

1. Enter our webshop on [www.microsynth.com](http://www.microsynth.com) (click on “SHOP”)
2. Click on „**ONT Sequencing**” in the green Analysis Services area
3. Click on “**Tube**” or “**Tube incl. Isolation**” under **BacterialSeq**.
4. Fill in the order form (use non-prepaid cyan labels) and submit your order

## Need More Information?

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Approach your territory sales manager (see entry page of your webshop account) or contact us at:

**Microsynth AG**  
Schützenstrasse 15  
9436 Balgach  
Switzerland  
Phone: +41 71 726 10 04  
Email: [sanger.support@microsynth.ch](mailto:sanger.support@microsynth.ch)