

Sample Submission Guidelines

Next Generation Sequencing (NGS): Plasmids & Long Amplicons



Acceptable Target Types

- Episomes (up to 100 kb in length)
 - Plasmids
 - Cosmids
 - Phagemids
 - BACs
- PCR Products (0.5 kb to 50 kb in length)

Sample Preparation

For accurate and timely sample processing and data delivery, please make sure your samples **EXACTLY MATCH** the information in your order details. Discrepancies may delay or prevent sample processing.

Sample Requirements

ACGT accepts the following sample types for NGS service:

- Purified DNA: Please provide at least 10 μ L, with OD260/280 >1.6 and <2.2 , and all samples normalized to 3 ng/ μ L.
- Bacterial Colony: Please provide sample colonies on agar plates, with 1 plate/sample.
- Bacterial Culture: Please provide samples in tubes, with at least 0.2 mL per sample.

Naming and Labeling Protocol

Clearly label with **BLACK** permanent marker or printing labels exactly as in your order details. Use **BLACK** markers only; colored markers may smear and become illegible. Use simple and short IDs.

- Tubes: label tube clearly
- Plates: label on the sides
- Tubes with screw-on caps: label both tube and cap

Notes

ACGT recommends DNA quantification using fluorometry. Quantification using Nanodrop is discouraged. Data quality of samples failing specified quantity and quality requirements cannot be guaranteed.

For bacterial colony and bacterial culture samples, additional **\$25 per sample** applies for plasmid template amplification.

Sample Packaging

All samples should be packaged securely in a ziploc bag within a shipping package, with adequate padding to prevent damage during shipment.

- Tubes:
 - Cap tubes tightly to prevent accidental spillage or cross contamination.
 - DNA samples in tubes or as a pellet may be shipped at room temperature for overnight delivery. Dry ice or wet ice is not required.
- 96-Well Plates:
 - Seal plates properly and wrap with parafilm to prevent spillage, cross-contamination, or evaporation during shipment. ACGT recommends using strip caps or high-quality heat seals.
 - ACGT recommends freezing your plate samples and shipping with dry ice. You may pack the plates (while still frozen on dry ice) in a Styrofoam box. Please ensure there is a sufficiency of dry ice on the top, bottom, and on both sides of the plate(s).
 - If shipping more than one plate, wrap plates in aluminum foil and/or vinyl tape (not lab tape) to avoid shifting during shipment. Lab tape tends to become brittle and rip apart when exposed to dry ice.
- Bacterial Agar Plates:
 - Wrap with parafilm over the edges of the plates
 - Pack agar plates in the shipping container with the lid side down. Pack with a protective bubble pad.
 - Plates may be shipped at room temperature if not overgrown.
- Bacterial Agar Lawns:
 - Wrap with parafilm over the edges of the lawns, and cool plates to room temperature to prevent condensation.
 - Once the plates have cooled, pack agar lawns in a Styrofoam cooler with the lid side down.
 - Pack ice packs in the cooler. Do not place ice packs directly on plates as condensation may leak into the plates.
 - On the container, clearly indicate “THIS END UP” with arrows for proper handling and delivery.

Sample Shipping

You will be notified by email once ACGT receives your samples. Once received, please allow 2-3 weeks for standard NGS order processing.

ACGT Dropbox

ACGT dropbox is the fastest, safest, and most convenient option. Simply place your order in any ACGT dropbox near you, and enjoy free overnight shipping. Please [click here](#) for a map of nationwide ACGT locations and pick up times.

Mailing

If there is no ACGT dropbox near you, please ship your samples to:

ACGT
Attn: MB Group
35 Waltz Drive
Wheeling, IL 60090

ACGT recommends sample shipment by FedEx, though ACGT accepts samples from the U.S. Postal Service and all other courier delivery services.