Microsynth

Sample Preparation for DNA Isolation

General Information

- For >24 samples, the use of barcoded tubes is required; for smaller quantities, it remains an option. Please send an email to isolation.support@microsynth.ch with "barcodes" in the subject line and indicate the quantity of barcodes, (1 barcode / plate or tube), the quotation number of your project and the full destination address. We ship two sets of barcodes for duplicates.

Important:

- **Send duplicates** of your samples whenever possible. If the nucleic acid isolation does not pass the quality control, we will perform a new isolation free of charge.
- For genera **not listed** here, please contact your sales representative for an individual solution.
- We provide **additional services** at an extra cost, such as subsampling, specialized handling, method development, and more.

Standard DNA Isolation (for Amplicon Metagenomics)

The microbiome is dynamically changing and needs to be preserved well. To not alter the bacterial / fungal / archaeal content of your sample, make sure to aliquot a representative homogenate and send it to us either frozen on dry ice or with the listed preservation buffer.

Send your samples in 2 mL skirted screw cap tubes.

From feces samples:

Species	**Raw Feces** **Send on dry ice**	**Sample Mixed with Preservation Buffer** **Send at ambient temperature**	
		Norgen (1)	**DNA/RNA Shield (2)**
Mouse	25 – 100 mg (4-10 mouse fecal pellets)	250 µl	750 µl
Rat	50 – 150 mg (1 rat fecal pellet weighs about 100 – 300 mg. If the pellet is big, only submit one half)	250 µl	750 µl
Human	100 mg	250 µl	750 µl
Subsampling (at surcharge)			
Mouse, Rat, Human	1 – 2 g	1 – 2 mL or whole stool preservation tube	

To avoid contamination with urinoma, ensure that feces samples collected have not come into contact with urine.

From garden or forest soil, biofilms, water:

Sample Type	No Buffer Send on dry ice	Sample Mixed with Preservation Buffer Send at ambient temperature	
		Norgen (1)	DNA/RNA Shield (2)
Garden soil, forest soil (3)	200 mg	250 µl	750 µl
Mixed cell cultures, biofilms, sludge	5 – 25 mg wet weight	250 µl	750 µl
Water or any filtered liquid	1 filter of 2 cm^2 (4)	-	750 µL (make sure filter is submerged completely)
Subsampling (at surcharge)			
Soil	1 – 2 g	n.a.	
Sandy Soil	5 – 10 g	n.a.	
Water	5 – 50 mL	n.a.	

(1) NorgenBiotek Fecal DNA collection and preservation tubes, follow manufacturer's instructions.

(2) ZymoResearch #R1100, follow manufacturer's instructions.

(3) Soil needs to have a suitably high microbe count. Normal garden or forest soil (loam, peat, low silt fraction). Soil with a high amount of inorganic material (clay, high silt, sand) will result in low DNA concentrations and is not recommended to be submitted.

(4) Place filters with microbe containing side facing inwards (the bottom of the filters sticks to the wall of the tube) or cut the filters into small pieces which will float freely after buffer addition.

Important:

- Make sure to **homogenize** your sample thoroughly before aliquoting the required amount listed above.
- **Do not use** ethanol or formalin for preservation.
- Send your sample in **2 mL skirted screw cap tubes** and use Microsynth barcodes.

For other microbiome samples (e.g. skin swabs, insect gut microbiome, tumor microbiome), low raw sample amount or treatments that lead to low microbiome count (e.g. antibiotics), contact your sales represenative.

Order Form Completion

Prior to shipping your samples for isolation to Microsynth, please follow these steps to complete your order form:

1. Enter our webshop at https://srvweb.microsynth.ch/.
2. Click on „Illumina Sequencing" in the green "Genetic Analysis" area.
3. Click on **Tubes and Plates** under "miCORE Amplicon Metagenomics".
4. Choose "Material for Isolaiton", fill in the order form and submit your order.
5. Prepare your samples according to this User Guide.
6. Send your samples together with the order printout and according to the listed conditions to Microsynth AG.

Shipping Address:
Microsynth AG
Isolation Department
Schützenstrasse 15
9436 Balgach
Switzerland

Microsynth

Need More Information?

Microsynth AG
Schützenstrasse 15
9436 Balgach
Switzerland
Phone: +41 71 722 83 33
Email: isolation.support@microsynth.ch