



Sample Collection Guidelines

In this document you will find information pertaining to common sample types. If your sample type is not included here, please contact us at info@microbiomeinsights.com and we will be glad to assist you.

Collection Device Recommendations:

DEVICES WITH BUFFER: Both Norgen Biotek and DNA Genotek Inc are manufacturers of biological specimen collection devices that incorporate a lytic stabilization buffer for storage at ambient temperature. We recommend their appropriate devices for stool, oral and external body sites only. Please refer to each manufacturer for more detail.

DRY SWABS: For dry swabs we recommend using the Becton-Dickinson, BBL CultureSwab EZ II which includes a double-swab encased in a rigid non-breathable transport tube. For all other dry swabs make sure to keep the wrapper or tube for transport to our lab.

Preparation:

In the sample manifest provided by your Microbiome Insights representative, be sure to include as much detail as needed to prepare a comprehensive bioinformatics report unique to your study. This includes your study design, as well as sample identification numbers, and variables of interest. With a permanent marker write the sample ID (unique identifier) on the sample tube or wrapper label. **Please ensure the sample IDs on labels match sample IDs on sample manifest and that no donor's personal information is provided anywhere.**

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Stool Sample

What you will need:

- One Collection device – dry swab or device with buffer
- One biospecimen bag per sample
- One pair of sterile gloves (optional)

Collect sample (dry swab method)

- ▮ **Wash hands with soap and water or apply gloves.**
- ▮ Step 1: Peel open sterile pouch at “peel here” and remove swab device, taking care not to contact the sterile. swab on any surface. Thoroughly rub the used toilet paper with the cotton swab(s) to ensure enough fecal material is transferred to swab(s) to thoroughly discolor the bulbs.
- ▮ Step 2: Carefully return the swab to the tube or wrapper ensuring that none of the swab, swab stick or vessel touch any surface.
- ▮ Step 3: Place the tube or wrapper into the biospecimen bag and seal the bag. Place in freezer immediately until sample is ready to ship.

Collect sample (liquid buffer method)

- ▮ **Wash hands with soap and water or apply gloves.**
- ▮ Step 1: Open wrapper or clamshell and follow manufacturer collection instructions.
- ▮ Step 2: Store at ambient temperature until ready to ship.



Tissue Sample

What you will need:

- One pre-labeled 2mL MoBio PowerBead tube (containing Lysis Buffer) per sample
- One biospecimen Bag per sample
- One pair of sterile gloves (optional)

Collect Sample

- ▮ **Wash hands thoroughly and cover hands with disposable gloves before collection, changing gloves frequently to avoid contamination.**
- ▮ Record the weight of each provided bead tube (including the lid).
- ▮ Carefully add 1.00 g or approximately 0.4mL of tissue of interest into the bead tube using sterile dissection tools to avoid contamination.
- ▮ Place final samples in individual biospecimen bags and store in freezer until ready for transport.



External or Oral Body Sample

What you will need:

- One Collection device
- One labeled 2mL MoBio PowerBead tube (containing 750 µl Lysis Buffer)
- For external body site samples only: Sampling Buffer to moisten swabs (50 mM Tris buffer [pH 7.6], 1 mM EDTA [pH 8.0], and 0.5% Tween-20)
- One biospecimen bag per sample
- One pair of sterile gloves (optional)

Collect Sample

- ▮ **Wash hands thoroughly with soap and water or apply gloves.** To avoid contamination of the swab, do not touch any part of the swab or swab vessel on any surface or with gloved hands.
- ▮ Step 1: Peel open sterile pouch at “peel here” and open the sterile vessel without contacting the sterile swab on any surface
- ▮ Step 2 for **scalp/skin samples**: Dip a fresh swab in moistening buffer. With one hand, stretch the skin site taut. With the other hand, hold the swab so the shaft is parallel to the skin surface, apply firm pressure and rub the swab back and forth **rigorously** 50 times (for 30 seconds).
- ▮ Step 2 for **oral cavity samples**: Vigorously rub behind molar teeth, roof of mouth and cheek with both swabs for 3 minutes, applying sufficient pressure.
- ▮ Step 3: Carefully return the swab to the tube ensuring that the swab, swab stick and vessel do not touch any surface
- ▮ Step 4: Place the tube into biospecimen bag and freeze until ready to ship.



Soil/Peat Sample

What you will need:

- Mesh sieve
- One cryo-vial or microfuge tube per sample
- One biospecimen bag per sample
- One pair of sterile gloves

Collect Sample

- Cover hands with disposable gloves before collection, changing gloves frequently to avoid contamination.
- Remove non-soil debris from sample by running samples through a mesh sieve.
- Carefully place 1.00 g of sieved soil into a cryo-vial or microfuge tube, avoiding contamination while opening, transferring and closing bead tubes. If applicable, include positive and negative controls.