LUXEMBOURG INSTITUTE OF HEALTH | INTEGRATED BIOBANK OF LUXEMBOURG IBBL

Processing Item Information Sheet (PIIS)

"Microbial DNA Extraction from Stool" Scheme [DNASTL26]

This sheet contains all the information on the **Stool Processing Item** that you should be aware of to conduct the above mentioned Scheme. **Please read carefully before performing any operation on the provided sample.**

Processing Item Description

- Source material: Stool from healthy donor.
- Packaging: DNA/RNA Shield-Fecal Collection Tube (Zymo Research).
- Date of Preparation: September 2026.
- Testing of Biological Hazard: Not applicable.
- Biosafety level: All operations have been conducted in a BSL 2 environment.
- Homogeneity and Stability Information: Homogeneity of the Processing Item will be controlled in September 2026. Stability of the Processing Item is for DNA at ambient temperature (4°C- 25°C) at least 2 years (data from tube manufacturer).

Instructions to Prepare the Processing Item for Extraction

- Any storage requirement between receipt and processing date: Store at **RT**. DNA extraction should be performed within 1 week of receipt.

Particular Handling/Safety Requirements

- Potential risks of Processing Item: Exempt of infectious risk.
- Individual protection equipment required: Standard laboratory equipment (laboratory coat, gloves).
- In case of puncture or cuts: Wash thoroughly with water and then disinfect during 10 minutes.
- In case of contact with the eye: Wash thoroughly with water or physiologic serum during 5 minutes.
- In case of contact with the mucus membranes and skin: Wash thoroughly with water.
- Measures to take in case of accidental spillage: Use disinfectant and thoroughly clean the effected surface.
- Waste elimination procedures: Waste generated by healthcare activities, to eliminate in incinerable plastic containers.

Scheme Specifications

- Please extract **Microbial DNA** from the Processing Item following your **usual routine DNA extraction method**.
- You will be asked to report information under the following scheme: **Microbial DNA Extraction from Stool**.
- Please be ready to enter the following information:
    - Kit used;

- Extraction method (salting out, magnetic bead-based, silica membrane-based, unsure, other);
- Volume of stool used for DNA extraction (ml) (**stool + stabilizer**);
- Use of RNase;
- Elution buffer composition (elution buffer from the kit, water, TE, AE, other) and elution volume (µl);
- Extraction equipment.

What to Submit

- Once you have extracted DNA from the stool (according to your extraction method), you pipet all the extracted DNA in the provided labelled Matrix 0.5 ml. The tube is already labelled with your Laboratory Number and the name of the Scheme (DNASTL26). **Make sure to properly close the tube to avoid evaporation or leakage.**
- IBBL requires a **minimum of 30 µl** of extract to perform the downstream analyses planned.
- As soon as extracted, the DNA tube must be shipped to the following address, by using the courier of your choice:

  IBBL, PT Programme
  Biorepository – Laura GEORGES - First Floor
  1B Rue Louis Rech
  L-3555 Dudelange
  LUXEMBOURG
  Phone: +352 26970-521
  Email: biorepository@ibbl.lu

- The extracted DNA can be temporarily stored at -80°C before shipment. In that case, the extracted DNA must be shipped to IBBL on dry ice.
- Shipment deliveries are accepted on weekdays between 08:30 and 16:30. Please note that IBBL cannot receive your sample on Saturdays nor Sundays.
- Your data must be submitted online to the PT website http://biospecimenpt.ibbl.lu/ by employing the login credentials (User email and Password) used to create your account on the aforementioned PT platform.
- Please complete the questionnaire of the DNASTL26 PT scheme as accurately as possible, adding any relevant detail and comment in the appropriate section. Please note that any data that could impact group assignment and alter the final evaluation even slightly, cannot be modified after data entry has been closed as ISO/IEC 17043 considers correct identification of methods and results as part of the participant's competence assessment.

Timelines

Shipment of the extracted DNA to IBBL	***Data Submission***	***Data analysis & Report preparation***	***Reports available***
Before 10 NOV 2026	17 NOV 2026, **latest**	20 NOV 2026 – 31 JAN 2027	March 2027

In case of doubts in the completion phase, please contact LIH/IBBL at IBBLPT@lih.lu