

## Processing Item Information Sheet (PIIS)

### “Dual DNA/RNA Extraction from Frozen Tissue” Scheme [DUAFR26]

This sheet contains all the information on the **Frozen Tissue 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: Pig liver.
- Preparation: Preparation of cores of 10-20 mg, starting from semi-liquid pig liver homogenate, using the CryoExtract®.
- Date of Preparation: July 2021. Cores will be prepared from July to August 2026.
- Testing of Biological Hazard: Not applicable.
- Biosafety level: All operations have been conducted in a BSL 2 environment.
- Homogeneity and Stability Information: Homogeneity and Stability of the Processing Item will be controlled from July to August 2026.

### Instructions to Prepare the Processing Item for Extraction

- Any storage requirement between receipt and processing date: Store at **-80°C**. DNA and RNA 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 **Genomic DNA** and **RNA** from the Processing Item following your **usual routine Dual DNA/RNA extraction method**.
- You will be asked to report information under the following scheme: **Dual DNA/RNA Extraction from Frozen Tissue**.
- Please be ready to enter the following information:
  - Homogenisation method (Equipment-based, Manual), Type of equipment, Homogenisation temperature, Settings;

- Kit used;
- Extraction method;
- Weight of core used for the extraction;
- Use of proteinase K;
- Use of RNase/DNase, elution buffer (elution buffer from the kit, water, TE, AE, other) and elution volume ( $\mu$ l) for each nucleic acid extracted

## What to Submit

- Once you have extracted DNA and RNA from the frozen tissue (according to your extraction method), you pipet all the extracted DNA in one of the two provided labelled Matrix 0.5 ml, and all the extracted RNA in the second labelled Matrix 0.5 ml. The tubes are already labelled with your Laboratory Number the name of the Scheme (DUAART26), and the aliquot type (DNA or RNA). **Make sure to properly close the tubes to avoid evaporation or leakage.**
- IBBL requires a **minimum of 30  $\mu$ l** of DNA, and **10  $\mu$ l** of RNA to perform the downstream analyses.
- As soon as extracted, the DNA and RNA tubes 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](mailto:biorepository@ibbl.lu)

- The extracted DNA and RNA can be temporarily stored at  $-80^{\circ}\text{C}$  before shipment. In that case, the extracted DNA and RNA 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 DUAART26 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

<i>Shipment of the extracted DNA and RNA to IBBL</i>	<i>Data Submission</i>	<i>Data analysis &amp; Report preparation</i>	<i>Reports available</i>
<b>Before</b> 10 NOV 2026	17 NOV 2026, <b>latest</b>	20 NOV 2026 – 31 JAN 2027	March 2027

In case of doubts in the completion phase, please contact LIH/IBBL at [IBBLPT@lih.lu](mailto:IBBLPT@lih.lu)