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Collection and shipment of specimen for Bulk RNA-sequencing (Bulk RNA-seq)

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Cellular Senescence Net...



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Protocol status: Working

We use this protocol and it's working

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Abstract

These samples are part of the JAX-Sen project in the SenNet Consortium. Here we provide details on specimen collection and shipment to the Robson laboratory at The Jackson Laboratory for Genomic Medicine (JAX-GM) in Farmington, CT for its processing for Bulk RNA-sequencing (Bulk RNA-seq).

Reagents and Materials:

- 1
 - 2mL Eppendorf tubes or 5 ml Eppendorf tubes
 - RNA Later solution
 - Wet Ice
 - Tweezers (clean, sterile)

Quality Key Points:

- 2
 - The tissue specimen should be always kept at 4 degrees Celsius and RNase-free.
 - It is crucial to not store the tissue specimen at RT to avoid any cell death, and tissue and/or RNA degradation.

Procedure:

- 3 **Timeline:** The daily shipping deadline at Jax BH is 12:00 noon. So, harvest the tissues before and closer to noon.

- 4 **Collection/Harvest:**

- 4.1 Animal was euthanized via cervical dislocation.
- 4.2 Animal was pinned to a necropsy tray which remained on wet ice throughout the harvest.
- 4.3 Animal was perfused with 20ml cold PBS.
- 4.4 Heart, pancreas, and kidney was collected and the specimen was transferred into tubes containing ice-cold RNA later (the volume will depend on the size of the specimen, but should cover abundantly the tissue and fill up the tube)
- 4.5 Individually parafilm the Eppendorf tube lids to their tubes before shipping.
- 4.6 Keep at 4 degrees Celsius thereafter, until shipping.

- 5 **Shipping:**



- 5.1 Place sample tubes in a plastic box (cardboard boxes insulate the samples from the cold ice) or in double Ziplock bags after checking that they are completely sealed.
- 5.2 Ship the sample box on wet ice.
- 5.3 Ship O/N on ice/ice pack, to:
The Jackson Laboratory for Genomic Medicine,
Farmington, CT, 06032