Aug 31, 2024 Version 2

JAX-Sen: Collection and shipment of specimen for Bulk RNA-sequencing (Bulk RNA-seq) V.2

DOI
dx.doi.org/10.17504/protocols.io.4r3l2qz5ql1y/v2

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Cellular Senescence Net...

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Protocol Citation: Laura Robinson, Susan Sheehan, Gaven Garland, Ron Korstanje 2024. JAX-Sen: Collection and shipment of specimen for Bulk RNA-sequencing (Bulk RNA-seq). **protocols.io** **https://dx.doi.org/10.17504/protocols.io.4r3l2qz5ql1y/v2**Version created by **Harshpreet Chandok**

Protocol status: Working
We use this protocol and it's working

Created: August 31, 2024

Last Modified: August 31, 2024

Protocol Integer ID: 106766

Keywords: JAX-Sen, processing for bulk rna, bulk rna, jackson laboratory for genomic medicine, rna, details on specimen collection, shipment of specimen, specimen collection, sequencing, jackson laboratory, genomic medicine, shipment to the robson laboratory, sennet consortium, seq, sen project in the sennet consortium, part of the jax, robson laboratory, specimen, sample, laboratory

Funders Acknowledgements:
National Institute on Aging (NIA) JAX-Sen Senescence Tissue Mapping Center
Grant ID: U54 AG079753

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).

Troubleshooting

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