

Urine Collection

Version: 1/Sept 2023 Edited by: Louise Lanoue

Summary:

This protocol describes the procedures to collect fecal samples from mice. Samples can be snapfrozen or stored in RNALater depending on PIs' protocols.

Reagents and Materials:

| Reagent/Material | Vendor | Stock Number |
|---|--------------|--------------|
| Clean cage w/o bedding | | |
| Drop pipets | | |
| Weigh boat/Aluminum foil | | |
| 1.8 ml Cryovials (any size vials) w. labels | | |
| Lab coats/gloves/PPE | | |
| Wet ice or Dry ice | | |
| RNase-Free 2 ml Tubes | ThermoFisher | AM12425 |

Protocol:

Method 1:

- 1. Wearing nitrile gloves, restrain the mouse by gently grasping the base of the tail with dominant hand. With non-dominant hand, place thumb and index finger on either side of the neck and draw up the loose skin, trapping the fold gently between the finger and thumb to ensure that the weight of the animal is supported.
- 2. Hold the mouse over a collection device (e.g., tube, weigh boat, foil, etc.) and lightly stroke the belly of the animal. Most mice will urinate at this time. If collected in weigh boats, etc, use clean drop pipet to transfer urine into a labeled tube.
- **3.** If no urine is produced, use index or thumb to exert a gently and constant pressure on the bladder of the mouse to facilitate urine release.
- Return mouse to its home cage.
 <u>NOTE:</u> Change gloves and collection instruments between mice.

Method 2:

1. Wearing nitrile gloves, place each mouse in <u>a single clean</u> cage with no bedding.

- 2. Allow mouse to urinate a total of 2 hours. Check each cage (mouse) periodically (~at least every 30 min). Most mice will urinate at this time.
- 3. Return mouse to its home cage when mouse hss urinated.
- Collect urine using a clean drop pipet and into a labeled tube.
 <u>NOTE:</u> Change gloves and collection instruments between mice.

For RNALater Collection:

- 1. Collect urine samples as described in methods 1 or 2.
- 2. For each sample collection, use a clean drop pipet
- **3.** Store in in RNAse free tubes.