



Fecal Collection

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Summary:

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

Reagents and Materials:

| Reagent/Material | Vendor | Stock Number |
|---|--------------|--------------|
| Clean cage w/o bedding | | |
| 1.8 ml Cryovials (any size vials) w. labels | | |
| Sterile forceps | | |
| Lab coats/gloves/PPE | | |
| Wet ice or Dry ice | | |
| RNALater solution -500 ml | ThermoFisher | AM7021 |
| RNase Decontamination Wipes | ThermoFisher | AM9788 |
| RNase-Free 2 ml Tubes | ThermoFisher | AM12425 |

Protocol:

1. Wearing nitrile gloves, place each mouse in a single clean cage with no bedding.
2. Allow mouse to defecate a total of 2 hours. Check each cage (mouse) periodically (~at least every 30 min). If no defecation, gently rub the lower abdomen/anus area to stimulate defecation. If mice have not defecated after 2 hours, return them to their homecage and repeat the process in the afternoon (~4-6 hours later).
NOTE: If no feces are collected both in the morning and afternoon sessions, attempt fecal collection the following day.
3. Once mouse has defecated 2-3 fecal pellets, remove mouse from the collection cage and return to its home cage.
4. Using a sterilized or disinfected forceps, collect at least two fresh fecal pellets, and place them in a vial. Make sure that the label matches the ID of the subject.
5. Place vial with fecal sample on ice/dry ice until all samples have been collected and are ready for storage or shipping. Samples can also be stored in RNA Later if required.
NOTE: Use clean/different forceps, gloves and collection cages between mice.

For RNALater Collection:

1. See steps 1-3.
2. For each sample collection, set aside a fresh, clean forceps with RNaseZap wipe.
3. Collect fecal pellets and store in 5-10 volumes of RNALater solution in RNase free tubes.
4. Store tubes overnight @4°C for RNALater penetration of tissues. Transfer to -80°C or -20°C for long term storage.