

Protocol for Meconium Homogenization in the Bullet Blender™

The protocol described in this document is for the use of the Bullet Blender™ for the homogenization of human meconium. This protocol was developed for the extraction and downstream analysis of various chemical analytes. You may need to alter this protocol to adapt it to your downstream application.

Materials Required: meconium, Bullet Blender™, methanol, pipettor, 2.0 ml microcentrifuge tubes, [bead spatula \(part number SPAT1\)](#), and [0.5 mm stainless steel beads \(part number SSB05\)](#)

Instructions

1. Accurately weigh 0.25 g of meconium and add to a 2.0 ml microcentrifuge tube. Try to keep the walls of the tube as clean as possible, and ensure the meconium sits as low in the tube as possible.
2. Add 1.4 ml of methanol to every tube.
3. Add one scoop (~0.07 g) of 0.5mm stainless steel beads to each tube.
4. Securely close the microcentrifuge tubes.
5. Place tubes into the Bullet Blender™.
6. Set controls for **SPEED 8** and **TIME 5** minutes. Press **Start**.
7. After the run, remove tubes from the instrument.
8. Verify that all samples have a uniform appearance. A smooth semi-liquid should exist. If homogenization is unsatisfactory, run for another five minutes at speed 8.
9. Proceed with your downstream application.

SAFETY NOTE!!!

When using a centrifuge to separate your homogenate from the debris and beads, make sure your tubes are balanced.

Acknowledgment:

Thanks to Chantry Clark, Stephanie Marin, and ARUP labs for sharing this protocol!



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