

## Bullet Blender® 50 Homogenization Protocol for Meconium

The protocol described in this document is for the use of the Bullet Blender<sup>®</sup> 50 for the homogenization of human meconium. This protocol does not specify a particular buffer - you may choose which is most appropriate for your downstream application (nucleic acid isolation, protein extraction, etc.).

Materials Required: meconium, Bullet Blender<sup>®</sup> 50, homogenization

buffer, pipettor, 50mL skirted centrifuge tubes (Axygen® or Corning® brand), 0.9-2.0 mm stainless steel blend (part

number SSB14B)

## Instructions

**1.** Weigh out an appropriate amount of meconium for analysis (0.1g – 3.5g) and place into a 50mL centrifuge tube.

- **2.** Add a mass of stainless steel beads to the tube equal to approximately 6x the mass of your sample.
- **3.** Add 0.2 mL to 7mL buffer (2 volumes of buffer for every mass of sample).
- 4. Screw caps onto centrifuge tubes **TIGHTLY**.
- **5.** Place tubes into the Bullet Blender<sup>®</sup> 50.
- 6. Set controls for SPEED 8 and TIME 12 minutes.
- 7. Remove tubes from the instrument.
- **8.** Visually inspect samples. They should be a smooth semi-liquid. If homogenization is unsatisfactory, run for another six minutes at the **SPEED 9**.
- **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.

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