# Bullet Blender® 50
# Homogenization Protocol for Meconium

The protocol described in this document is for the use of the Bullet Blender® 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® 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® 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.**