Homogenization in the Bullet Blender® 5
Protocol for *D. melanogaster* Adults

The protocol described in this document is for the use of the Bullet Blender® 5 for the homogenization of *Drosophila melanogaster* adults. 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: adult *Drosophila*, Bullet Blender® 5, homogenization buffer, pipettor, 5mL Axygen® brand tubes, and 0.5mm zirconium oxide beads (part number ZROB05)

Instructions

1. Place 100-1000mg of flies into 5ml tubes.
2. Add a volume of beads equal to the mass of tissue. **NOTE:** 100mg ≅ 100µL.
3. Add 0.2mL to 2.0mL buffer (2 volumes of buffer for every volume of sample).
4. *Tightly* screw the centrifuge tubes closed and place them into the Bullet Blender®.
5. Set controls for **SPEED 8** and **TIME 3** minutes. Press start.
6. After the run, remove the tubes from the instrument.
7. Visually inspect samples, if homogenization is unsatisfactory, run for another two minutes at **SPEED 9**.
8. 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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