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Protocol for Hair Homogenization in the Bullet Blender™

The protocol described in this document is for the use of the Bullet Blender™ for the homogenization of hair (from a variety of animals). Note that the time and speed settings may differ due to the variation in consistency/texture of hair from species to species. 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: hair sample, saline, Bullet Blender™, heating block, homogenization buffer (8M urea, 50mM DTT, 50mM Tris Hcl), pipetor, microcentrifuge tubes, and 0.5mm glass beads (product number GB05)

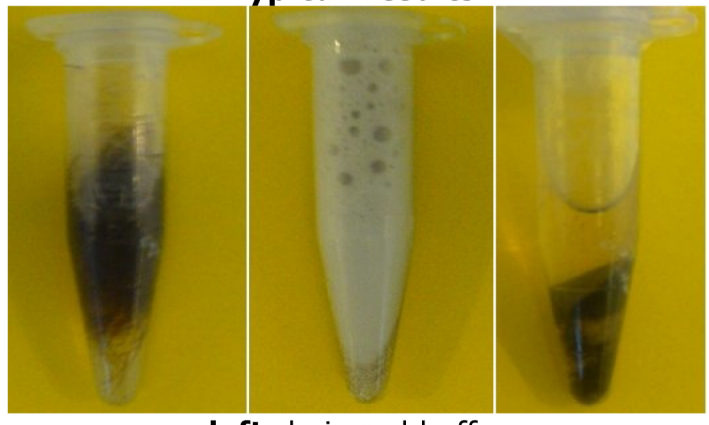
Instructions

1. Load 25mg hair into a microcentrifuge tube.
2. Add 0.1mL glass beads (0.5mm) to the tube.
3. Add 1.0mL buffer.
4. Close the centrifuge tubes.
5. Place tubes into a 95°C heating block for ten minutes.
6. Place tubes into the Bullet Blender™.
7. Set controls for **SPEED 8** and **TIME 3** minutes. Press **Start**.
8. After the run, remove tubes from the instrument.
9. Visually inspect samples. If homogenization is unsatisfactory, run for another two minutes at the **SPEED 8.**
10. 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.

Typical Results



left: hair and buffer
middle: after heating and Bullet Blender™ treatment
right: after centrifugation.

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