



NEXT
ADVANCE
Bullet Blender Protocol



Hair

- Extract molecules (DNA, RNA, protein, chemicals)
- Dry final product
- Sample sizes: 10 to 100 mg.

Materials Required

One of these Bullet Blenders

- **Bullet Blender 5E (BBY5E)**
- **Bullet Blender 5 Gold (BB5E-AU)**

Reagents

None required

Bead choices

- **2.0 mm zirconium oxide beads (ZROB20)** use 500ul beads

Procedure

1. Place the sample in the tube with the beads.
2. Close the tubes tightly and place them in the Bullet Blender.
3. Set the controls for Speed 20 and Time 10. Press Start.
4. After the run, remove the tubes from the instrument and visually inspect the samples. If homogenization is incomplete, homogenize for another 5 minutes.
5. Proceed with your downstream application.



Hair

- Extract molecules (DNA, RNA, protein, chemicals)
- Wet final product
- Sample sizes: up to 5 mg.

Notes on the protocol: 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

One of these Bullet Blenders

- **Bullet Blender** (BBX24)
- **Bullet Blender Blue** (BBX24B)
- **Bullet Blender Storm 24** (BBY24M)
- **Bullet Blender 24 Gold** (BB24-AU)

Reagents

Homogenization buffer

2 x volume of sample

Bead choices

- **2.0 mm zirconium oxide beads** (ZROB20) use 100ul beads
- **0.5 mm zirconium oxide beads** (ZROB05) Use a volume of beads equivalent to 1 x the volume of the sample

Procedure

1. Take up to 6 or 7 strands of hair, and chop them into lengths < 1 cm.
2. Place the sample in the tube with the beads.
3. Close the tubes tightly and place them in the Bullet Blender.
4. Set the controls for Speed 12 and Time 5. Press Start.
5. After the run, remove the tubes from the instrument. Add a volume of buffer that is twice the volume of the sample.
6. Set the controls for Speed 3 and Time 3. Press Start.
7. Proceed with your downstream application.