NEXT ADVANCE

Bullet Blender Protocol

Zebrafish (Larva)

- Extract molecules (DNA, RNA, protein, chemicals)
- Wet final product
- Sample sizes: up to 300 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

- **PINK bead lysis kit** (PINK) (for samples up to 100 mg.)
- **RED bead lysis kit** (RED) (for samples between 100 and 300 mg.)
- **0.5 mm zirconium oxide beads** (ZROB05) Use a volume of beads equivalent to 1 x the volume of the sample

Procedure

1. Place the sample in the tube with the beads.
2. Add a volume of buffer that is twice the volume of the sample. Sample volume may be approximated by sample weight. E.g., for a 100 mg. sample, add 0.2 ml. buffer.
3. Close the tubes tightly and place them in the Bullet Blender.
4. Set the controls for Speed 10 and Time 3. Press Start.
5. After the run, remove the tubes from the instrument and visually inspect the samples. If homogenization is incomplete, repeat the homogenization step at a higher speed.
6. Proceed with your downstream application.

NEXT ADVANCE

Bullet Blender Protocol

Zebrafish (Larva)

- Extract molecules (DNA, RNA, protein, chemicals)
- Wet final product
- Sample sizes: 100 to 1000 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 5 Storm** (BBY5M)
- **Bullet Blender 5E** (BBY5E)
- **Bullet Blender 5 Gold** (BB5E-AU)

Reagents

Homogenization buffer

2 x volume of sample

PBS (optional)

2 x volume of sample

Bead choices

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

Procedure

1. Place the sample in the tube with the beads.
2. (Optional) Wash the sample 3x with 1/2 tube volume of PBS to remove surface contaminants.
3. Close the tubes tightly and place them in the Bullet Blender.
4. Set the controls for Speed 8 and Time 3. Press Start.
5. After the run, remove the tubes from the instrument and visually inspect the samples. If homogenization is incomplete, repeat the homogenization step at a higher speed.
6. Proceed with your downstream application.