Homogenization protocol for Mouse adipose using Bullet Blender

Materials:

Samples: 10 mg of frozen Adipose from a healthy mouse

Bead lysis kit: 1.5 mL RINO/Eppendorf Lysis Kit (SKU: PINKR1/PINKR5 or PINKE1/PINKE5)
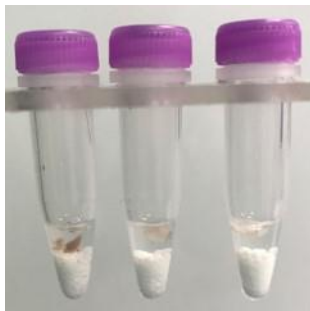
Buffer volume: 100 to 300 µL of buffer

Method - Homogenization:

1. Determine the sample size, buffer (depends on the downstream application), buffer volume and the bead lysis kit. ***Note:*** *Choose the correct* lysis kit *for optimal homogenization.*
2. Cut the sample and place into the buffer-filled tubes (Figure 1).
3. Close the tubes tightly and place into the Bullet Blender. ***Note:*** *Confirm the compatibility of the* contact plate *with the tubes (RINO/EPPENDORF) used.*
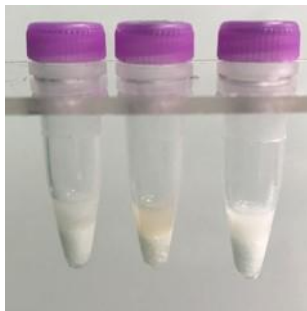4. Set the speed and time on the Bullet Blender (Table 1). Press "Start", and wait for the run to complete.

Bullet Blender Model	Settings
BB24-AU or BT24M	Speed 6; Time 3

5. Remove the tubes and visually inspect the samples to confirm complete homogenization (Figure 2).
   Note: *Foaming in the sample tubes may be observed after homogenization.*
6. If homogenization is satisfactory, proceed with the downstream steps.

Figure 1: Pre-homogenization	**Figure 2**: Post-homogenization	*Homogenization verification*