





Homogenization protocol for Frozen Corn Kernel using Bullet Blender

Materials:

Samples: 35 mg of frozen corn kernel

Bead lysis kit: 1.5 mL RINO/Eppendorf Lysis Kit (SKU: NAVYR1/NAVYR5 or NAVYE1/NAVYE5)

Buffer volume: 300 to 600 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 <u>lysis kit</u> 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 <u>contact</u> <u>plate</u> 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 10; Time 5 - Dry> Speed 10; Time 5 - Wet

- 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



