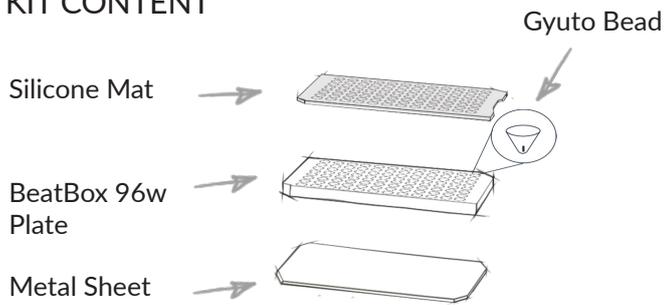
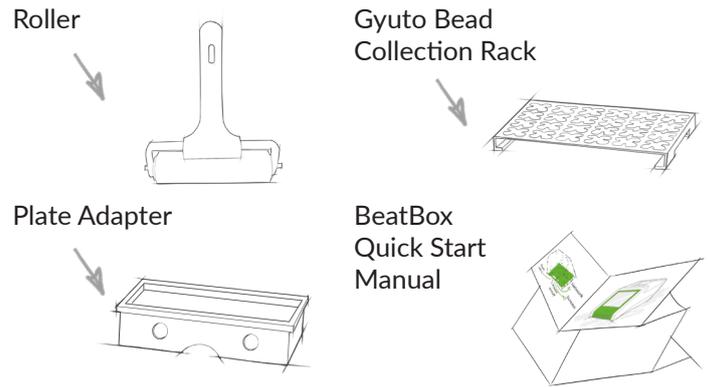




**KIT CONTENT**



**BEATBOX ACCESSORIES**



**Pre-Requisites**

Common lab equipment is required for the sample preparation.

Equipment	Quantity and Description
SAMPLE	Mammalian tissue (fresh/frozen), 1–5 mg wet weight. For most mammalian tissue types, 1–5 mg of wet-weight tissue sample is equivalent to 100–500 µg protein starting amount. For other sample types contact PreOmics for adapted protocols.
LYSIS BUFFER	iST LYSE BUFFER from PreOmics® iST kits. For SP3-iST kits, contact <a href="mailto:info@preomics.com">info@preomics.com</a> for an adapted protocol.
CENTRIFUGE	Swing-bucket centrifuge for 96-well plate and adequate counterweight are required for spin-down of homogenate.
BeatBox instrument	Tissue homogenizer with accessory kit.
BEATBOX BEAD REMOVER	Optional: BeatBox accessory to remove all 96 Gyuto beads from the BEATBOX 96w PLATE after processing. Contact PreOmics for more information.

**Method**

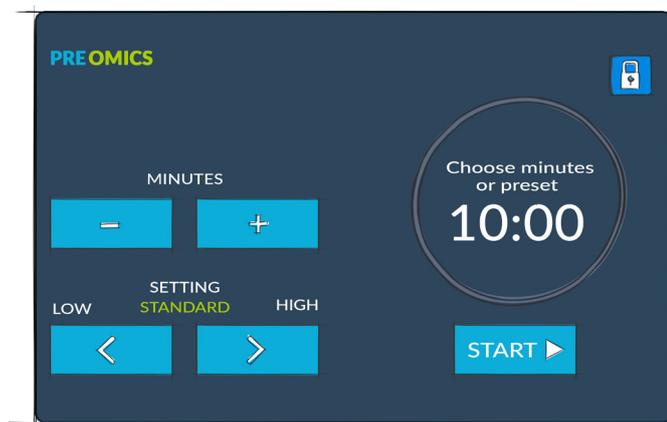
For a detailed description and graphical representation on how to use the BeatBox, please refer to the BeatBox Quick Start Manual 96x.

**1. PLATE PREPARATION \*NOTE1\***

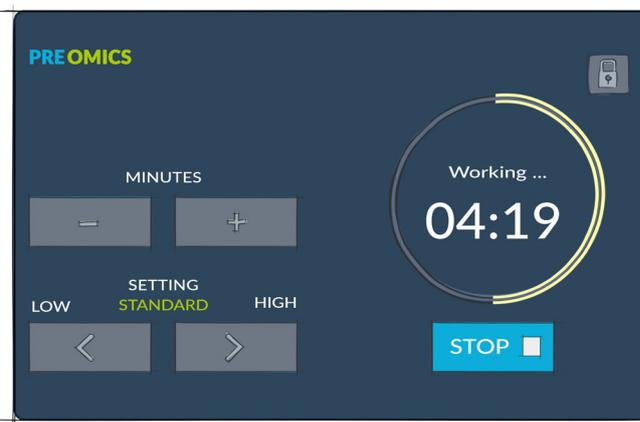
- 1.1. Remove the **SILICONE MAT** from the **BEATBOX 96w PLATE** while keeping the **METAL SHEET** attached to the base of the **BEATBOX 96w PLATE**.
- 1.2. Add **SAMPLE** into the well of the **BEATBOX 96w PLATE**. \*NOTE2\*
- 1.3. Add 100 µL of **LYSIS BUFFER** to each well of the **BEATBOX 96w PLATE**.  
Make sure that **SAMPLE** is covered with **LYSIS BUFFER**.
- 1.4. Cover the **BEATBOX 96w PLATE** with the **SILICONE MAT** and make sure that the plate is properly closed by using the **ROLLER**. Remove the **METAL SHEET** from the base of the **BEATBOX 96w PLATE**.

## 2. BEATBOX HOMOGENIZATION

- 2.1. Turn ON the BeatBox, place the **BEATBOX 96w PLATE** on the **PLATE ADAPTER** and insert the **PLATE** and **ADAPTER** assembly into the GARAGE.
- 2.2. Use default configurations (SETTING: STANDARD; MINUTES: 10 min) or optimize homogenization conditions for your sample by adjusting SETTING and MINUTES in the BeatBox menu:



BeatBox screen for settings



BeatBox screen during processing

*SETTING:* User can choose between LOW, STANDARD, or HIGH. The power level increases from LOW to HIGH.

*MINUTES:* User can choose between 1–40 min (up to 10 min in 30 sec increments; above 10 min in 5 min increments).

- 2.3. Insert the GARAGE into the BeatBox and press START.
- 2.4. After the BeatBox run is completed, remove the GARAGE from the instrument, and the **BEATBOX 96w PLATE** from the **PLATE ADAPTER**.
- 2.5. Spin down the **BEATBOX 96w PLATE** (500 rcf; 30–60 sec).
- 2.6. Place the **BEATBOX 96w PLATE** on the **GYUTO BEAD COLLECTION RACK** and remove the **SILICONE MAT**.  
If intact tissue is visible, repeat BeatBox run (steps 2.1–2.6).
- 2.7. Transfer the homogenate into a new plate or tube for subsequent processing or analysis workflows. Alternatively use the **BEATBOX BEAD REMOVER** to remove all 96 GYUTO BEADS from the wells.

## 3. CONTINUE WITH PREOMICS' KITS

- 3.1. Determine the protein concentration of the homogenate. Visit our FAQ for compatible assays and more information.
- 3.2. Continue with PreOmics' kits:
  - For iST kits, continue with the iST sample preparation using up to 100 µg of extracted protein (if the volume is <50 µL, fill up to 50 µL with LYSIS BUFFER). Start with step "2. DIGEST" and follow the protocol.
  - For SP3-iST kits: Please contact [info@preomics.com](mailto:info@preomics.com).

**\*NOTE1\***

**SINGLE USE ONLY:** Each well and GYUTO BEAD can be used only once, but unused wells of the BEATBOX 96w PLATE can be used at a later timepoint. It is recommended not to run the BeatBox 96w PLATE more than 40 minutes in total (independent of the setting).

**\*NOTE2\***

For sample handling, plastic tweezers are preferable to metal tweezers to avoid sticking of the **GYUTO BEADS** to the tweezer. Keep tissue sample on ice or at room temperature and make sure that the tissue sample is thawed before adding PreOmics iST LYSE BUFFER.

For answers to frequently asked questions, please visit our FAQ page at [www.preomics.com/faq](http://www.preomics.com/faq).

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