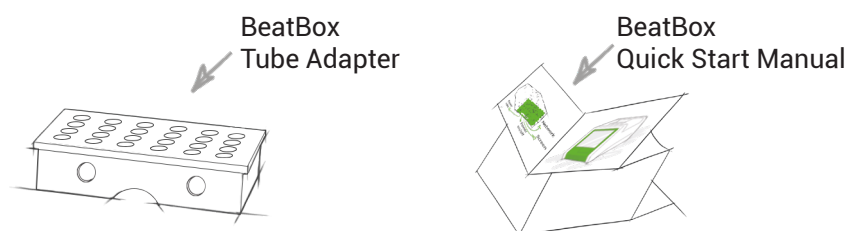


## KIT CONTENT



## BEATBOX ACCESSORIES



## Pre-Requisites

Common lab equipment is required for the sample preparation.

Equipment	Quantity and Description
TISSUE SAMPLE	Fresh or frozen tissue. For other sample types contact PreOmics for adapted protocols.
LYSIS BUFFER	8-25 ml PreOmics' LYSE or RIPA buffer. See protocol for details. Contact <a href="mailto:info@preomics.com">info@preomics.com</a> to order the required volume of PreOmics LYSE buffer.
2-FOLD iST LYSE BUFFER	Optional: Required to continue with iST sample preparation, if RIPA was used as lysis buffer. See protocol for details. 2-fold iST LYSE needs to be ordered in addition to the iST kits from PreOmics
CENTRIFUGE	2.0 mL reaction tube centrifuge is required for spin-down of the homogenate.

## Method

For a detailed description and graphical representation on how to use the BeatBox, please refer to the BeatBox Quick Start Manual 24x.

1. TUBE PREPARATION **\*NOTE1\***

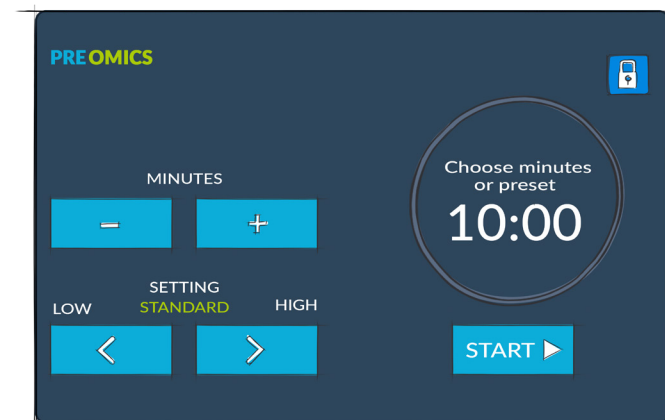
- 1.1. Carefully open the **BEATBOX TUBE**.
- 1.2. Add wet mammalian **TISSUE SAMPLE** (5-50 mg of wet-weight) to tubes. **\*NOTE2\***
- 1.3. Add 300-1000  $\mu$ L of **LYSIS BUFFER** to each **BEATBOX TUBE**. **LYSIS BUFFER** can be PreOmics' LYSE or RIPA buffer. If you intend to freeze surplus homogenate, use RIPA buffer for homogenization and subsequent storage.  
(For SP3 kit family: Please contact [info@preomics.com](mailto:info@preomics.com)) **\*NOTE3\***

1.4. Close the **BEATBOX TUBE** and put it into the **BEATBOX TUBE ADAPTER**.

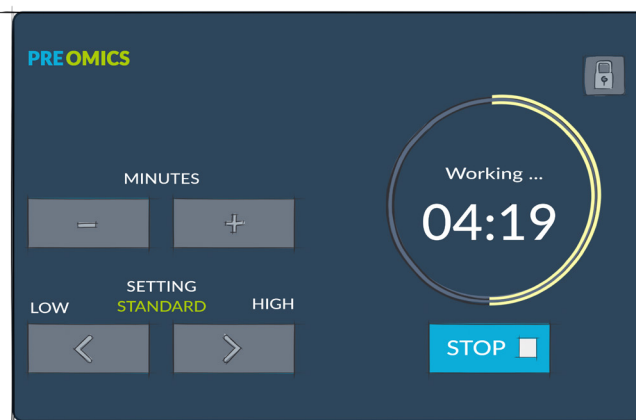
## 2. BEATBOX HOMOGENIZATION

2.1. Turn on the BeatBox and insert the **BEATBOX TUBE ADAPTER** into the GARAGE.

2.2. Use default configurations (SETTING: STANDARD; MINUTES: 10 minutes) or select optimal lysis conditions for your tissue sample by adjusting SETTING and MINUTES in the BEATBOX menu:



BeatBox screen for settings



BeatBox screen during processing

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

*MINUTES: You can choose between 1 and 10 minutes (30 sec increments).*

2.3. Insert the GARAGE and press START.

2.4. After the BeatBox run is completed, remove the GARAGE from the instrument, and the **BEATBOX TUBES** from the **BEATBOX TUBE ADAPTER**. **\*NOTE4\***

2.5. Spin down the **BEATBOX TUBES** (1500 rcf; 30 – 60 sec).

## 3. CONTINUE WITH PREOMICS' KIT FAMILY

3.1. Determine the protein concentration of the homogenized TISSUE SAMPLE.

3.2. When iST LYSE BUFFER is used, 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 LYSE BUFFER).  
Continue with step "2. DIGEST" and follow the protocol.

3.3. When RIPA buffer is used, continue with the iST sample preparation using up to 100 µg of extracted protein.  
Add 2-FOLD iST LYSE BUFFER in ratio 1:1 (v/v) with tissue homogenate (if the volume is < 50 µL, fill up to 50 µL with iST LYSE BUFFER).  
Continue with step "2. DIGEST" and follow protocol.

**\*NOTE1\*** **SINGLE USE ONLY:** Kits components cannot be re-used.

**\*NOTE2\*** Allow deep-frozen and frozen tissue to thaw on ice for 5-10 minutes.

**\*NOTE3\*** Buffer to sample ratio should be adjusted individually to create optimal conditions.

Lower buffer volumes down to 100 µL are possible but recovering the full sample volume may be difficult. In case lower lysis buffer volume is used, make sure that the TISSUE SAMPLE is covered with buffer.

**\*NOTE4\*** If intact tissue is still visible, please repeat BeatBox run (steps 2.1-2.5).