

Upon removal of plates from -80 freezer, with grinding bead(s) preloaded, load two evenly distributed plates into the tissue lyser by following the directions below.

Place the deep well 96 plate in the plate adapter set as shown by the diagram below.

Pull the Locking pin (A) upward out of its slot, and rotate it 90 degrees. This releases locking device.

Turn the hand wheel (B) until maximum clamping range is reached.

Rotate back the locking pin (A) by 90 degrees until it engages with its slot.

Insert the adapter and press it lightly into the indentation in the clamp (C) Ensure adapter plate tabs are properly seated within clamp before starting run

Turn the hand wheel clockwise with thumb and index finger until the adapter does not move freely. Continue rotating the hand wheel clockwise until 6-8 audible clicks of the locking pin is reached. This prevents the opening of the adapter during the run. Instrument hood must be down during operation to run.

To remove adapters lift the locking pin and turn the hand wheel in a counter clockwise direction.

The first run will be 30 seconds at 30 Hz, after first run remove plates and immerse in liquid nitrogen until bubbling decreases (~1 min). Complete this step two times for thorough maceration of tissue sample.

Remove plates after second run and tap plate on countertop to ensure ground samples migrate to bottom of wells.

Add appropriate amount of RLT buffer to each well and run samples for two minutes at 30 Hz, carry out this step three times, swap plate position from left side to right side of tissue lyser, and flip plate orientation 180 degree during one or two of these runs

