

## Bioanalyzer Instructions

Prepping the Gel (use filtered gel within 4 weeks)

1. Pipette 550uL **gel matrix** (red) into a spin filter
2. Centrifuge at 1500g for 10 mins at room temp
3. Aliquot 65uL filtered gel into 0.5mL RNase-free tubes

Prepping the Gel-Dye Mix

1. Allow **RNA dye** (blue) to equilibrate to room temp for 30 mins (in the dark)
2. Vortex **RNA dye** (blue) for 10 secs and spin down
3. Add 1 uL RNA dye into a 65uL aliquot of filtered gel
4. Vortex solution
5. Spin gel-dye mix at 13,000g for 10 mins at room temp

Turn on Laptop/Bioanalyzer (use gel-dye mix within 1 day)

1. Select correct icon
2. Select correct program (RNA, DNA, protein)

Cleaning the Electrodes

1. Slowly fill one of the wells of the electrode cleaner with 350uL RNase-free water
2. Place the electrode cleaner in the bioanalyzer
3. Close the lid and let sit for 5 mins
4. Upon removing the electrode cleaner, keep lid open for at least 30 secs (to allow for evaporation)

Loading the Gel-Dye Mix

1. Put a new chip on the chip priming station
2. Pipette 9uL of gel-dye mix in the well marked **G**
3. Position the plunger at 1mL
4. Close the chip priming station (make sure it clicks)
5. Press plunger down until it's held by the clip
6. Wait exactly 30 secs and release clip
7. Wait exactly 5 secs and slowly pull plunger back to 1mL
8. Open chip priming station and pipette 9uL gel-dye mix into wells marked **G**
9. Discard remaining gel-dye mix

Loading the Conditioning Solution and Marker

1. Pipette 9uL of RNA conditioning solution (white) into well marked CS
2. Pipette 5uL of **RNA marker** (green) in all 11 sample wells and the ladder well

Loading the Diluted Ladder and Samples

1. Pipette 1uL ladder into the well marked ladder
2. Pipette 1uL of sample into each of the 11 sample wells (pipette 1uL **RNA marker** (green) into each unused sample well)
3. Vortex chip for 1 min at 2400 rpm
4. Run the chip in the bioanalyzer within 5 mins (RNA assay)

\* clean the electrodes after every run