AUTOMATED ELECTROPHORESIS

Experion™ RNA StdSens Analysis Kit

Quick Guide

1 Temperature Equilibration

Remove one tube of each kit reagent from storage. Place the RNA ladder (**red cap**) on ice and allow all other reagents to warm to room temperature (~15 min). Briefly vortex and then centrifuge the tubes before use to collect the solutions at the bottom of the tubes. Protect stain from light at all times.

2 Clean the Electrodes

- Place a cleaning chip filled with 800 µl Experion electrode cleaner into the electrophoresis station
- Close the lid for 2 min; remove the cleaning chip
- Place another cleaning chip filled with 800 µl DEPC-treated water into the electrophoresis station
- Close the lid for 5 min. Replace the water in the cleaning chip and repeat the rinse step. Remove the cleaning chip, and leave the lid open for 60 sec to allow the electrodes to dry completely

3 Prepare the Gel and Gel-Stain Solution

- Centrifuge 600 µl RNA gel (**green cap**) in a spin filter at 1,500 x g for 10 min

Note: Unused filtered gel may be stored at 4ºC for 1 month.

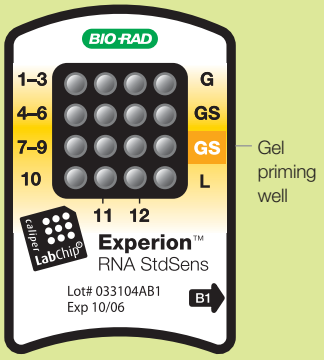
- Pipet 65 µl filtered gel into an RNase-free microcentrifuge tube; add 1 µl RNA stain (**blue cap**) to the filtered gel and vortex
- **Optional:** Centrifuge gel-stain solution at 13,000 x g for 10 min

4 Prepare the Samples and RNA Ladder

- Pipet at least 2 µl RNA ladder (**red cap**) and at least 2 µl each RNA sample into RNase-free microcentrifuge tubes; denature the samples and ladder for 2 min at 70ºC
- Immediately place the samples and ladder on ice; leave them on ice for 5 min
- Briefly spin down the tubes and then mix; store on ice

5 Prime the Chip

- Remove an RNA StdSens chip from its packaging and place it on the chip platform in the Experion priming station
- Add 9 µl gel-stain solution to the gel priming well
- Close the lid of the priming station, set the pressure to **B**, and set the time to **1**
- Press the **Start** button
- When priming is complete, remove the primed chip from the priming station
- Flip the chip over, and visually inspect the microchannels for trapped air bubbles or incomplete priming



BIO-RAD

6 Load the Samples and RNA Ladder Into the Chip

- Pipet 9 µl gel-stain solution into the other well labeled **GS**
- Pipet 9 µl filtered gel into the well labeled **G**
- Pipet 5 µl loading buffer (yellow cap) into each sample well (1–12) and into the well labeled **L** (ladder well); do not leave any sample well empty
- Pipet 1 µl denatured RNA ladder into the well labeled **L**
- Pipet 1 µl denatured sample into each of the 12 sample wells; pipet 1 µl TE buffer or DEPC-treated water into any unused sample wells
- Place the chip in the Experion vortex station and vortex for 1 min
- Run the chip in the Experion electrophoresis station within 5 min of loading

7 Run the RNA StdSens Analysis

- Turn the Experion electrophoresis station on and then launch the Experion software
- Place the chip on the chip platform of the electrophoresis station and close the lid
- Select **New Run**, then the desired **Experion RNA StdSens** Assay (**Eukaryotic**, **Prokaryotic Total RNA**, or **Eukaryotic mRNA**)
- Click the **Start** button on the screen to begin the run
- When the run is complete, remove and discard the used chip

8 Clean the Electrodes

- Place a cleaning chip filled with 800 µl DEPC-treated water into the electrophoresis station
- Close the lid for 60 sec to clean the electrodes, and then open it for 60 sec to allow the electrodes to dry completely
- Remove the cleaning chip

Ordering Information

Catalog #	Description
700-7001	Experion System, 100–120 V, for RNA analysis, includes electrophoresis station, priming station, vortex station, software, USB2 cable, test chip, instructions (analysis kits sold separately)
700-7002	Experion System, 220–240 V, for RNA analysis, includes electrophoresis station, priming station, vortex station, software, USB2 cable, test chip, instructions (analysis kits sold separately)
700-7103	Experion RNA StdSens Analysis Kit for 10 Chips
700-7104	Experion RNA StdSens Analysis Kit for 25 Chips
700-7153	Experion RNA StdSens Chips, 10
700-7154	Experion RNA StdSens Reagents and Supplies, for 10 chips
700-7251	Experion Cleaning Chips, 10
700-7252	Experion Electrode Cleaner, 250 ml
700-7253	Experion DEPC-Treated Water, 100 ml
700-7254	Experion Spin Filters, 10
700-7255	Experion RNA Ladder