

Storage Conditions


Product	Storage
RNA StdSens chips	Room temperature
RNA ladder	–70°C
Rest of reagents	4°C (protected from light)

Essential Practices

- Aliquot the stock ladder to avoid multiple freeze/thaw cycles
- Use heat to denature RNA ladder and samples just before use
- Use RNase-free microcentrifuge tubes, pipet tips, and water or TE buffer
- Always wear gloves when handling reagents and chips
- Handle chips by the edges; do not touch the glass
- Remove chip from packaging only immediately before use
- Avoid sources of dust and contaminants when preparing samples and loading the chip. Foreign particles in reagents, samples, and the wells of the chip can interfere with results
- Deep-clean the electrodes if contamination is suspected or if a chip was left in the instrument overnight
- Use of colored or coated (for example, siliconized polypropylene) tubes when preparing kit reagents or samples is not recommended; such tubes may cause artifacts during the separation
- Refer to the instruction manual for more details

Ordering Information

Catalog #	Description	Catalog #	Description
700-7001	Experion System , 100–240 V, for RNA and DNA analyses, includes electrophoresis station, priming station, vortex station, software, USB2 cable, instructions (analysis kits sold separately)	700-7111	Experion RNA StdSens Starter Kit
		700-7153	Experion RNA StdSens Chips , 10
		700-7154	Experion RNA StdSens Reagents and Supplies , for 10 chips, includes 1,250 µl RNA gel, 20 µl RNA StdSens stain, 20 µl RNA ladder, 900 µl RNA StdSens loading buffer, 2 spin filters
700-7103	Experion RNA StdSens Analysis Kit for 10 Chips , includes 10 RNA StdSens chips, Experion RNA StdSens reagents and supplies for 10 chips	700-7251	Experion Cleaning Chips , 10
700-7104	Experion RNA StdSens Analysis Kit for 25 Chips , includes 25 RNA StdSens chips, Experion RNA StdSens reagents and supplies for 25 chips	700-7252	Experion Electrode Cleaner , 250 ml
		700-7253	Experion DEPC-Treated Water , 100 ml
		700-7254	Experion Spin Filters , 10
701-7001	Experion System , 100–240 V, for RNA and DNA analyses (700-7001), Experion RNA StdSens starter kit (700-7111)	700-7255	Experion RNA Ladder

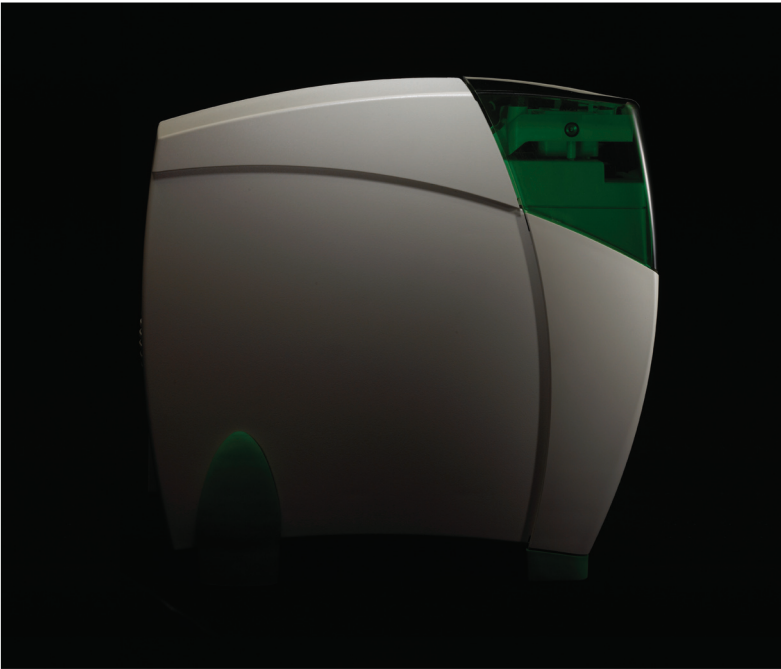
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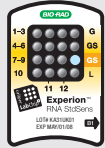
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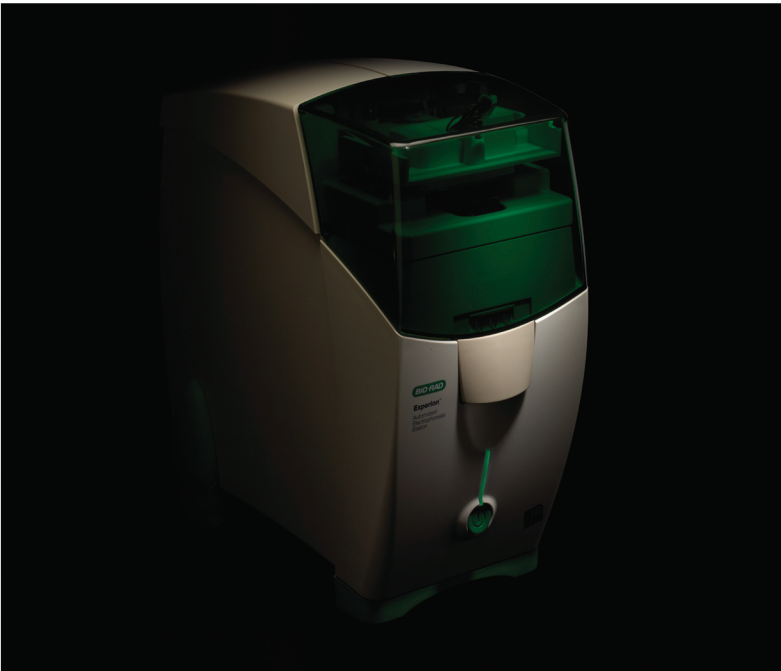




Experion™ RNA StdSens Analysis Kit

Quick Guide



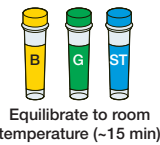


Experion RNA StdSens Analysis Kit Quick Guide

For complete instructions, refer to the Experion RNA StdSens analysis kit instruction manual. Full manuals are available online at www.bio-rad.com or contact us by phone at 1 800 424 6723 for an electronic copy. Read the full protocol and essential practices sections if using for the first time.

1

Equilibrate Kit Reagents (B = loading buffer, G = gel, ST = stain, L = ladder)

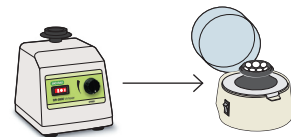
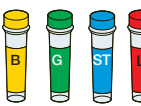


Equilibrate to room temperature (~15 min)



Thaw on ice

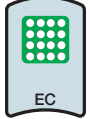
- Protect stain from light



- Briefly vortex and spin down reagents. Keep L on ice. Aliquot the unused ladder and store at -70°C

2

Clean the Electrodes



Cleaning chip

+ 800 µl Experion electrode cleaner (EC)



2 min



Remove EC chip



Cleaning chip

+ 800 µl DEPC-treated water



5 min



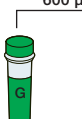
60 sec

Repeat DEPC H₂O rinse.

Note: If this is the first time an RNA analysis is being performed on your system, follow the deep-cleaning procedure outlined in the RNA kit manual or software version 3.0 Help section (use search term: electrodes).

3

Prepare the Gel (G) and Gel-Stain (GS) Solution



600 µl



65 µl



1 µl

Filtered G

1,500 x g for 10 min then discard filter

Filtered G

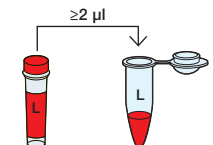
GS

Briefly spin down

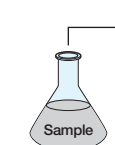
Note: Filtered gel (G) may be stored for up to 1 month at 4°C (protected from light). After 1 month, unused gel should be refiltered before it is used again. Prepare fresh GS daily.

4

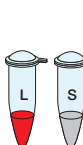
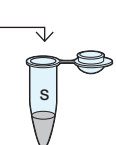
Prepare the Samples and RNA Ladder



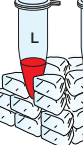
≥2 µl



≥2 µl



2 min at 70°C



5 min on ice



Spin down



Keep on ice

5

Prime the Chip



9 µl



Gel priming well

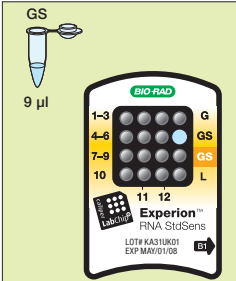


B1

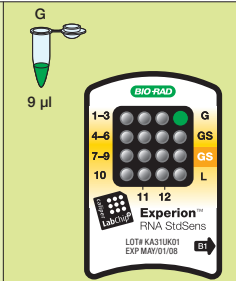
- Add GS to priming well
- Select B1 on priming station
- Place chip in station and press **Start**
- Remove chip after priming is complete
- Flip the chip over and visually inspect the microchannels for trapped air bubbles or incomplete priming

6

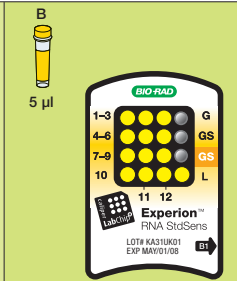
Load the Prepared Samples and RNA Ladder Onto the Chip



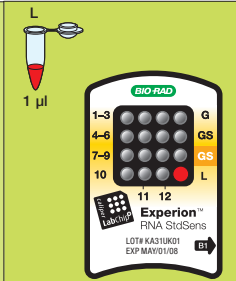
6.1



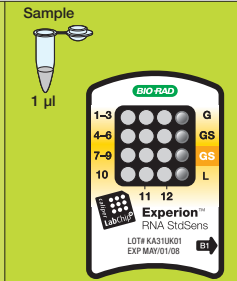
6.2



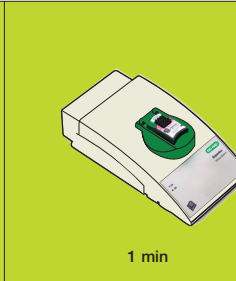
6.3



6.4



6.5

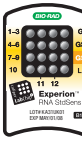


6.6

- Pipet 9 µl gel-stain solution into the second **GS** well
- Pipet 9 µl filtered gel into well **G**
- Pipet 5 µl loading buffer (**yellow cap**) into each sample well (1-12) and into well **L**; do not leave any sample well empty
- Pipet 1 µl denatured RNA ladder into well **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 (1 min)
- Run the chip in the Experion electrophoresis station within 5 min of loading

7

Run the RNA StdSens Analysis



1 min

- Select **New Run**, then the desired **Experion RNA StdSens Assay (Eukaryotic, Prokaryotic Total RNA, or Eukaryotic mRNA)**
- Click the **Start** (▶) button onscreen
- Select number of samples to run
- When the run is complete, remove and discard the used chip

8

Clean the Electrodes

- DEPC H₂O rinse as in step 2, except rinse for 1 min