

Storage Conditions


Product	Storage
RNA HighSens Chips	Room temperature
RNA ladder	-70°C
Rest of reagents	4°C (protected from light)

Essential Practices

- Aliquot the stock ladder and any prepared 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
- 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 (analyses kits sold separately)	700-7111	Experion RNA StdSens Starter Kit
		700-7155	Experion RNA HighSens Chips , 10
		700-7156	Experion RNA HighSens Reagents and Supplies , for 10 chips, includes 1,250 µl RNA gel, 20 µl RNA HighSens stain, 20 µl RNA ladder, 900 µl RNA HighSens loading buffer, 100 µl RNA sensitivity enhancer, 2 spin filters
700-7105	Experion RNA HighSens Analysis Kit for 10 Chips , includes 10 RNA HighSens chips, Experion RNA HighSens reagents and supplies for 10 chips		
700-7106	Experion RNA HighSens Analysis Kit for 25 Chips , includes 25 RNA HighSens chips, Experion RNA HighSens reagents and supplies for 25 chips	700-7251	Experion Cleaning Chips , 10
		700-7252	Experion Electrode Cleaner , 250 ml
		700-7253	Experion DEPC-Treated Water , 100 ml
701-7001	Experion System , 100–240 V, for RNA and DNA analyses (700-7001), Experion RNA StdSens starter kit (700-7111)	700-7254	Experion Spin Filters , 10
		700-7255	Experion RNA Ladder

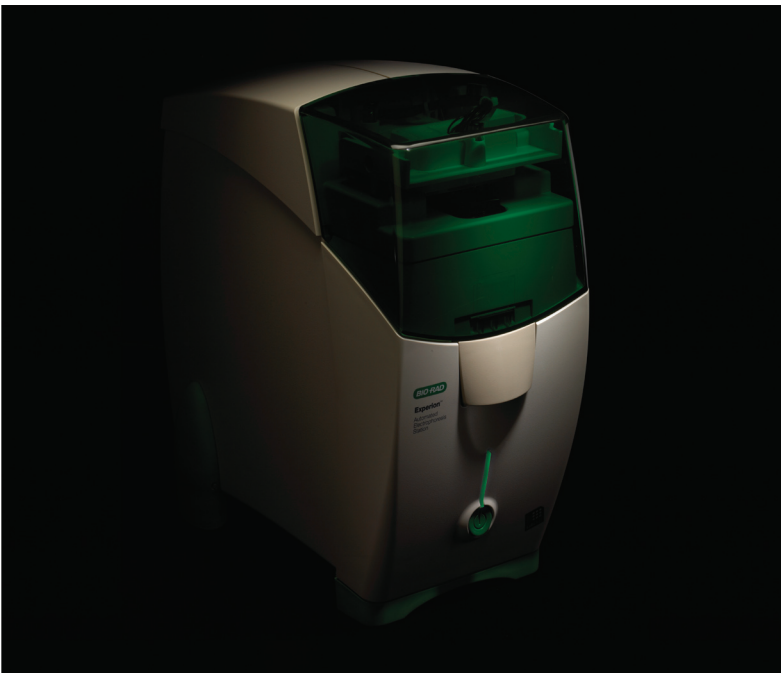
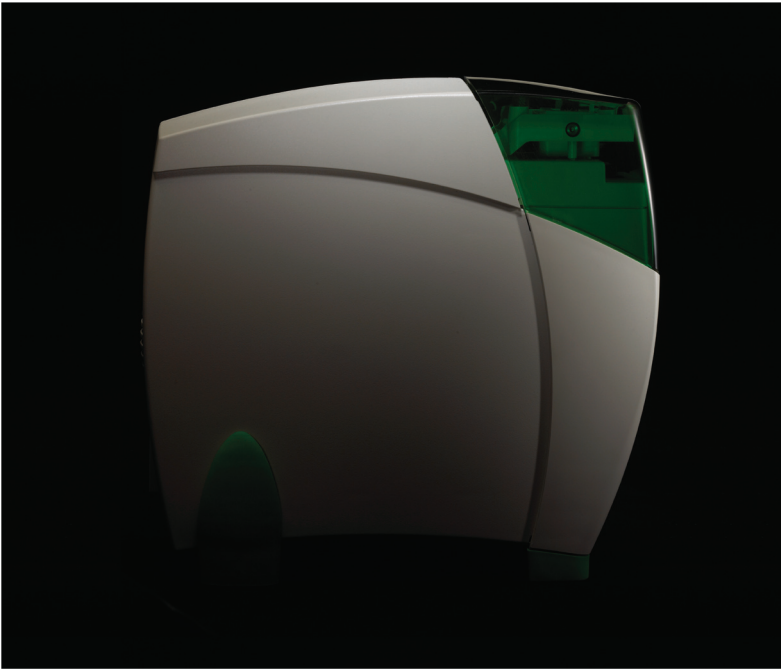
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Experion™ RNA HighSens Analysis Kit
Quick Guide

BIO-RAD

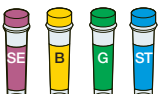


Experion RNA HighSens Analysis Kit Quick Guide

For complete instructions, refer to the Experion RNA HighSens 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 (SE = sensitivity enhancer, B = loading buffer, G = gel, ST = stain, L = ladder)

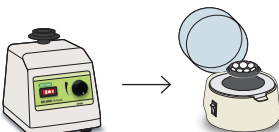
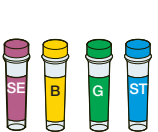


Equilibrate to room temperature (~15 min)



Thaw on ice

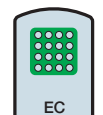
- Protect stain from light



- Briefly vortex and spin down tubes. Keep L on ice

2

Clean the Electrodes



Cleaning chip

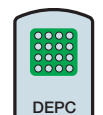


800 µl Experion electrode cleaner (EC)

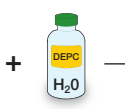


2 min

Remove EC chip



Cleaning chip



800 µl DEPC-treated water



5 min

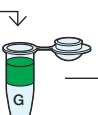
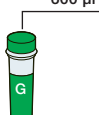
60 sec

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



13,000 x g for 10 min

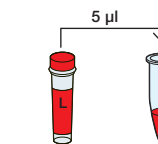
Aliquoted to 65 µl

13,000 x g for 10 min

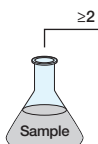
Note: Filtered gel may be stored for up to 1 month at 4°C protected from light. After 1 month, unused gel should be refiltered before it is used again. Prepare fresh GS daily.

4

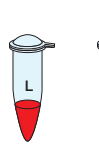
Prepare the Samples and RNA Ladder



Use 1.5 ml tube for ladder



≥2 µl



2 min at 70°C



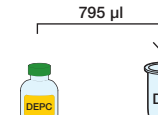
Ice 5 min



Keep on ice



Keep on ice



DEPC-treated water



DL (diluted ladder)

795 µl

Aliquot and store -70°C for future use

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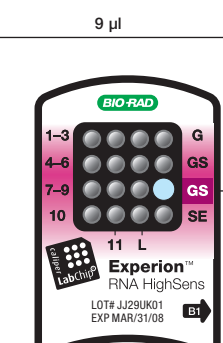
Aliquot and store -70°C for future use

5

Prime the Chip



9 µl



Gel priming well

B1

LOT# JJ29UK01 EXP MAR/31/08

LOT# JJ29UK01 EXP MAR/31/08

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- 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

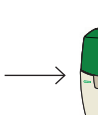
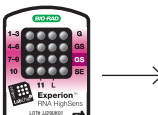
8

Clean the Electrodes

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

7

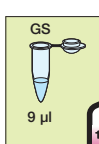
Run the RNA HighSens Analysis



- Select **New Run**, then the desired **Experion RNA HighSens** 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

6

Load the Prepared Samples and Diluted RNA Ladder Onto the Chip



9 µl

6.1

6.2

6.3

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6.46

6.47

- Pipet 9 µl gel-stain solution into the second **GS** well

- Pipet 9 µl filtered gel into well **G**

- Pipet 6 µl sensitivity enhancer into well **SE**



5 µl

6.4

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6.31



1 µl

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1 µl

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