

AUTOMATED ELECTROPHORESIS

Experion™ Pro260 and RNA StdSens Starter Kits

- All reagents and consumables needed for microfluidic separation of protein or RNA samples
- Sample standards for protein or RNA applications
- Troubleshooting tips
- Cleaning practices and standard methods
- A demonstration of assay reproducibility and sizing function
- Instructions include an explanation of the relative quantitation analysis, calibration curve, and % total analysis
- An introduction to essential software and system analysis functions



Everything You Need for a Successful Start With Microfluidic Separations

Experion starter kits are a valuable tool for training, troubleshooting, or validating assays on the Experion automated electrophoresis system. Using these starter kits, you can:

- Get started quickly with your new Experion system
- Practice techniques and analyze data
- Troubleshoot and validate the system using a known standard
- Explore essential functions of the Experion software

Introduction

Experion starter kits are intended for use with the Experion automated electrophoresis system, which applies microfluidics to electrophoretic separation of protein, RNA, and DNA. The kits are designed to get new users started quickly and to introduce some best practices when working with the system. In addition, the starter kits can be used as a troubleshooting and performance qualification tool for assay validation. Two Experion starter kits are available — one for protein applications and one for RNA applications. The protein starter kit is based on some of the core reagents found in the Experion Pro260 analysis kit (catalog # 700-7101) and includes reagents and consumables that may not be readily available in the laboratory. The RNA starter kit is based on the core reagents in the Experion RNA StdSens analysis kit (catalog # 700-7103).

Standard Samples

Experion protein and RNA starter kits include standards that enable the user to establish methods and techniques without the complication of sample variability. After successfully going through a run with the starter kit as a guide, a user can be more confident in the technique as well as system performance. Bovine IgG (BGG) standard is included in the protein starter kit to enable the user to generate a high quality standard curve and reproducible quantitation and sizing values. Mouse liver total RNA is the standard included in the RNA starter kit. Because RNA samples are prone to degradation, the RNA starter kit provides a quality controlled, RNase-free total RNA standard to ensure high quality 28S and 18S peaks.

Convenient Training, Troubleshooting, and Assay Validation

Whether you are self-training, troubleshooting the system, or validating the assay, Experion starter kits make these tasks more convenient by providing standard samples that give expected results. Well established protocols for testing the reproducibility of the system are presented in the user manuals to reduce variability of assay performance due to individual protocol or sample preparation differences. Each manual provides step-by-step instructions for common data analysis, giving the user a self-paced method to become familiar with the software.

BIO-RAD

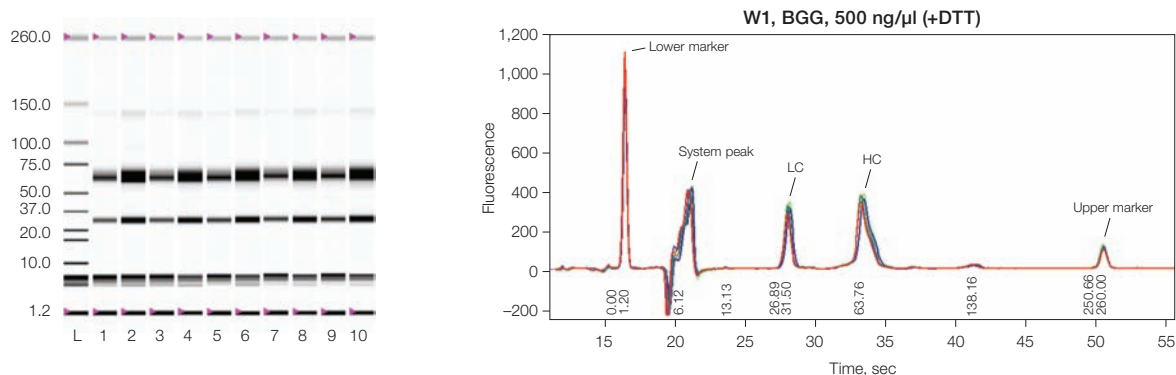


Fig. 1. Left, virtual gel results for the Pro260 test 2, where 500 ng/μl BGG was loaded into wells 1, 3, 5, 7, and 9, and 1000 ng/μl was loaded into wells 2, 4, 6, 8, and 10. Right, overlay electropherograms of wells loaded with 500 ng/μl of BGG. Reducing conditions resulted in the two subunits (light and heavy chains) of approximately 31 and 64 kD.

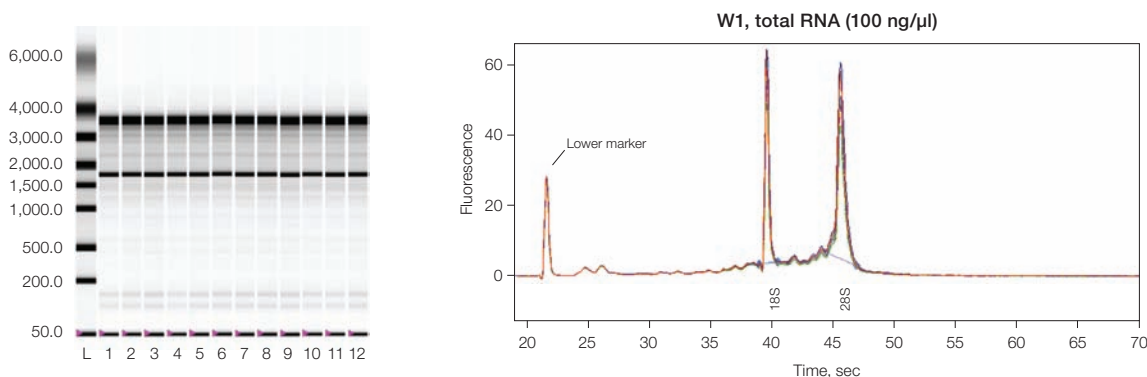


Fig. 2. Left, virtual gel of mouse liver total RNA standard loaded at 100 ng/μl (wells 1–12). Right, electropherogram overlays of all wells demonstrate reproducibility from well-to-well. %CV for quantitation reproducibility typically will be ≤15%. For the chip run presented, %CV for quantitation is 7.7%.

Ordering Information

Catalog #	Description	Catalog #	Description
700-7110	Experion Pro260 Starter Kit , includes 3 Experion Pro260 chips, 1 cleaning chip, Experion reagents, spin filters, BGG protein standard, DTT, cleaning swabs, electrode cleaner, tips and tubes to run 3 chips, ultrapure water, instructions	700-7107	Experion DNA 1K Analysis Kit for 10 Chips , includes 10 DNA chips, 1 cleaning chip, 3 x 250 μl DNA 1K gel, 40 μl DNA stain, 20 μl DNA 1K ladder, 750 μl DNA 1K loading buffer, 3 spin filters
700-7111	Experion RNA StdSens Starter Kit , includes 3 Experion RNA StdSens chips, 2 cleaning chips, Experion reagents, spin filters, total RNA standard, cleaning swabs, electrode cleaner, RNase-free tips and tubes to run 3 chips, Experion DEPC-treated water, instructions	700-7108	Experion DNA 12K Analysis Kit for 10 Chips , includes 10 DNA chips, 1 cleaning chip, 650 μl DNA 12K gel, 40 μl DNA stain, 20 μl DNA 12K ladder, 750 μl DNA 12K loading buffer, 3 spin filters
700-7112	Experion Mouse Liver Total RNA , 500 ng/μl, 20 μl	700-7252	Experion Electrode Cleaner , 250 ml
700-7101	Experion Pro260 Analysis Kit for 10 Chips , includes 10 Pro260 chips, 3 x 520 μl Pro260 gel, 45 μl Pro260 stain, 60 μl Pro260 ladder (10–260 kD), 400 μl Pro260 sample buffer, 3 spin filters	700-7253	Experion DEPC-Treated Water , 100 ml
500-0208	Bovine Gamma Globulin (BGG) Standard Sample , 2.0 mg/ml, 2 ml	700-7264	Foam, lint-free swabs , 25
700-7103	Experion RNA StdSens Analysis Kit for 10 Chips , includes 10 RNA StdSens chips, 2 cleaning chips, 1,250 μl RNA gel, 20 μl RNA StdSens stain, 20 μl RNA ladder, 900 μl RNA StdSens loading buffer, 2 spin filters	VWR87001-688	VWR barrier pipet tips , sterile (narrow-bore, 20 μl universal pipet tips, RNase-free) (Purchase directly from VWR Scientific Products)
700-7105	Experion RNA HighSens Analysis Kit for 10 Chips , includes 10 RNA HighSens chips, 2 cleaning chips, 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		



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