# AUTOMATED ELECTROPHORESIS Experion<sup>®</sup> DNA 1K and 12K Analysis Kits

- For automated electrophoresis detection and basic analysis with the Experion system
- Accurate sizing and quantitation of DNA fragments
- Analysis of 1–11 samples in 30 to 40 minutes
- Innovative Caliper Life Sciences' LabChip technology



# Single-Step DNA Analysis in 40 Minutes

### Introduction

Experion DNA 1K and DNA 12K analysis kits combine state-of-the-art chip design with high-quality reagents to perform reproducible, quantitative, and accurate analysis of DNA fragments in minutes with the Experion system. Streamlined chip preparation methods and minimal sample requirements result in rapid experiments with minimal hands-on time.

# The Experion DNA 1K and DNA 12K Advantage

Innovative chip design, chemistry, software, and hardware make DNA sizing and quantitation fast and easy.

- Analysis of 1–11 samples in 30 to 40 minutes
- Single-step determination of DNA purity
- Accurate sizing and quantitation of DNA fragments

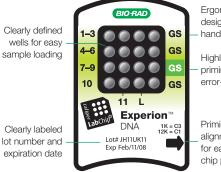
### **Experion DNA 1K and 12K Chips**

Experion DNA 1K and DNA 12K chips offer an optimized microchannel architecture within an ergonomic caddy for exceptional DNA separation, chip handling, and results. Each chip holds up to 11 samples and is clearly labeled with well number, priming code, lot number, and expiration date for easy, error-free runs.

### **Experion DNA 1K and 12K Reagents**

Both the DNA 1K and DNA 12K assays utilize the same chips and similar protocols, which makes it easy to switch between DNA assays. The DNA assays yield good resolution over the separation range, either between 15–1,500 bp or between 50–17,000 bp, thereby allowing accurate quantitation and sizing. Experion DNA analysis kits include the following reagents and supplies:

- High-quality gel matrix for separation comparable to agarose DNA gels
- Fluorescent dye for high sensitivity and accurate detection
- Experion DNA ladder for accurate sizing and quantitation
- Optimized loading buffer for reproducible results
- Spin filters for convenient gel preparation



Ergonomic caddy design for easy handling

Highlighted chip - priming well for error-free priming

Priming code and alignment arrow for easy, accurate chip priming

Approximate size (30 x 50 x 10 mm)





#### **Specifications**

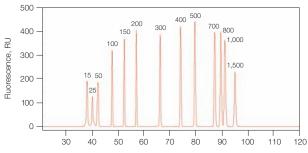
	DNA 1K Assay	DNA 12K Assay
Analytical		
Separation sizing range	15–1,500 bp	50–17,000 bp
Resolution	25–100 bp: 5 bp	100–1,500 bp: 10%
	100–700 bp: 5%	1,500–12,000 bp: 20%
	700–1,000 bp: 10%	
Quantitation range*	0.5–50 ng/µl	0.5–50 ng/µl
Limits of detection**	0.1 ng/µl	0.1 ng/µl
Sizing accuracy***	±10%	±15%
Sizing reproducibility***	$CV \le 5\%$	$CV \le 5\%$
Quantitation accuracy*** (in TE buffer)	±25%	±20%
Quantitation reproducibility*** (in TE buffer)	$CV \le 20\%$	$CV \le 20\%$
Maximum salt	200 mM KCl/NaCl	250 mM KCl/NaCl
concentration in samples	15 mM MgCl <sub>2</sub>	15 mM MgCl <sub>2</sub>
Physical		
Sample volume	1 µl	1 µl
Number of samples/chip	11	11

\* 100 bp and larger.

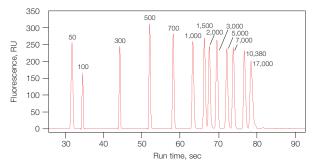
\*\* Outside recommended quantitation range.

\*\*\* Applies to interchip and intrachip variation.

#### DNA 1K ladder



DNA 12K ladder



The DNA 1K and 12K ladders. The DNA fragment sizes are indicated in base pairs above the peaks.



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## Experion Software Requirements

The DNA 1K and DNA 12K analysis kits require Experion software version 2.1 or higher. Current version is 3.0.

#### **Ordering Information**

Catalog #	Description
700-7107	Experion DNA 1K Analysis Kit for 10 Chips, includes 10 DNA chips, Experion DNA 1K reagents and supplies for 10 chips
700-7108	Experion DNA 12K Analysis Kit for 10 Chips, includes 10 DNA chips, Experion DNA 12K reagents and supplies for 10 chips
700-7050	Experion Software, version 3.0, system operation and standard data analysis tools, PC
700-7163	Experion DNA Chips, 10
700-7164	Experion DNA 1K Reagents and Supplies, for 10 chips, includes 3 x 250 µl DNA 1K gel, 40 µl DNA 1K stain, 20 µl DNA 1K ladder, 750 µl DNA 1K loading buffer, 3 spin filters
700-7165	Experion DNA 12K Reagents and Supplies, for 10 chips, includes 650 µl DNA 12K gel, 40 µl DNA 12K stain, 20 µl DNA 12K ladder, 750 µl DNA 12K loading buffer, 3 spin filters
700-7251	Experion Cleaning Chips, 10
700-7252	Experion Electrode Cleaner, 250 ml
700-7253	Experion DEPC-Treated Water, 100 ml
700-7261	Experion DNA 1K Ladder
700-7262	Experion DNA 12K Ladder



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