

Agilent DNA Kits for the Agilent 2100 Bioanalyzer System

A Smart Solution for Nucleic Acid Analysis

The Agilent 2100 Bioanalyzer DNA assays allow analysis of high resolution multiplex PCR reactions, measuring precise size and concentration of each fragment. High sensitivity and a large linear dynamic range of the analysis allows detection of small impurities in PCR amplifications.

Key Features

- High sensitivity: Down to 0.5 ng or 5 pg concentration
- Excellent sizing and quantification: Unmatched accuracy and reproducibility with pre-packaged reagents, standarized assays and automated data analysis
- Minimal sample consumption: Only 1 μ L of sample required
- Fast results: Automated analysis of up to 12 samples in 30-45 minutes
- Quick and easy sample comparison: Automated sample alignment, one-click overlay, scaling and zooming features
- Data display options: Gel-like image, electropherogram, and tabular formats
- Clean: Minimal exposure to hazardous materials, such as ethidium bromide
- Conveniently archive, store and share digital data



Analytical specifications	High Sensitivity DNA	DNA 1000	DNA 7500	DNA 12000
Sizing range	50 – 7,000 bp	25 – 1,000 bp	100 – 7,500 bp	100 – 12,000 bp
Typical resolution	50 – 600 bp: 10 % 600 – 7,000 bp: 20 %	25 – 100 bp: 5 bp 100 – 500 bp: 5 % 500 – 1,000 bp: 10 %	100 – 1,000 bp: 5 % 1,000 – 7,500 bp: 15 %	100 – 1,000 bp: 5 % 1,000 – 12,000 bp: 15 %
Sizing precision¹	5 % CV	5 % CV	5 % CV	5 % CV
Sizing accuracy¹	\pm 10 %	\pm 10 %	\pm 10 %	\pm 15 %
Quantitative precision¹	50 – 2,000 bp: 15% CV 2,000 – 7,000 bp: 10% CV	25 – 500 bp: 15 % CV 500 – 1,000 bp: 5 % CV	100 – 1,000 bp: 10 % CV 1,000 – 7,500 bp: 5 % CV	100 – 1,000 bp: 15 % CV 1,000 – 12,000 bp: 10 % CV
Quantitative accuracy¹	\pm 20 %	\pm 20 %	\pm 20 %	\pm 25 %
Quantitative range¹	5 – 500 pg/ μ L	0.5 – 50 ng/ μ L	0.5 – 50 ng/ μ L	0.5 – 50 ng/ μ L
Maximum buffer concentration in sample	10 mM Tris and 1 mM EDTA	250 mM for KCl 250 mM for NaCl 15 mM for MgCl ₂	250 mM for KCl 250 mM for NaCl 15 mM for MgCl ₂	250 mM for KCl 250 mM for NaCl 15 mM for MgCl ₂
Physical specifications				
Analysis time	45 minutes	35 minutes	30 minutes	30 minutes
Samples per chip	11	12	12	12
Sample volume required	1 μ L	1 μ L	1 μ L	1 μ L
Kit stability	4 months	4 months	4 months	4 months
Kit size	110 samples	300 samples	300 samples	300 samples

¹Determined using ladder as sample

Ordering information

Order No.	Description
5067-4626	High Sensitivity DNA kit
5067-4627	High Sensitivity DNA reagents
Order No.	Description
5067-1504	DNA 1000 kit
5067-1505	DNA 1000 reagents
Order No.	Description
5067-1506	DNA 7500 kit
5067-1507	DNA 7500 reagents
Order No.	Description
5067-1508	DNA 12000 kit
5067-1509	DNA 12000 reagents

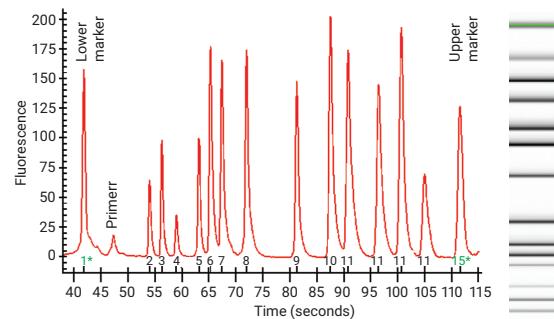
DNA 1000 Assay

Example: High resolution PCR fragment analysis

- Analysis of small PCR products
- Multiplex PCR analysis
- Analysis of RT-PCR reactions
- Restriction digests of small plasmids
- Analysis of DNA smears

For comparative PCR it is important to get sufficient resolution over the entire size range of PCR products. When analyzing a mixture of different PCR products, the DNA 1000 kit outperforms traditional slab gels. In addition, accurate quantitative data is obtained, allowing for discrimination of minute differences of amplified products. Example: High resolution multiplex PCR of 13 targets (99–955 bp).

Data kindly provided by QIAGEN GmbH, Hilden, Germany.

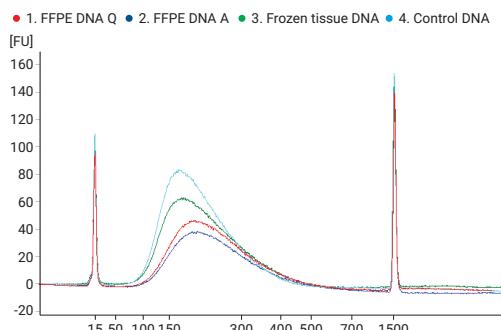


High Sensitivity DNA Assay

Example: High sensitivity analysis

- Analysis of precious samples of limited abundance
- Analysis of targeted enriched libraries for next generation sequencing

The Agilent High Sensitivity DNA Kit allows analysis of precious DNA samples of limited abundance, such as DNA extracts from FFPE, limited tissue, and cell-free samples. Additionally, it is well-suited for QC of low input or targeted enriched libraries for next generation sequencing.



www.agilent.com/genomics/bioanalyzer

For Research Use Only. Not for use in diagnostic procedures.

This information is subject to change without notice.