

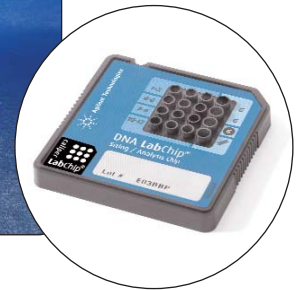
New DNA Series II kits

A smarter solution for nucleic acid analysis

DNA chips 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.

Advantages of the Lab-on-a-Chip approach

- **High sensitivity** – use laser (LIF) detection to detect DNA fragments down to 0.1 ng
- **Broad linear dynamic range** – detect very weak bands next to very strong bands (more than 2 orders of magnitude)
- **Excellent sizing and quantitation** – unmatched accuracy and reproducibility with pre-packaged reagents, standardized assays and automated data analysis
- **Minimal sample consumption** – only 1 μ L of material required per analysis.
- **Faster results** – complete auto-



- **Automated analysis** of 12 samples in about 30 minutes
- **Quick and easy sample comparison** – automated sample alignment, one-click overlay, scaling and zooming features
- **Conveniently archived and stored digital data** – easily share data with others and export it for publications or presentations

- **Alternative data display options** – results shown in gel-like image, electropherogram, and tabular formats
- **Easy-to-use** – simply load the chip, press "start" and the Agilent 2100 bioanalyzer does the rest
- **Clean** – minimal exposure to hazardous materials, such as ethidium bromide

Analytical specifications

Sizing range
Sizing resolution

Sizing accuracy*
Sizing reproducibility*
Quantitation accuracy*
Quantitation reproducibility*

Quantitative range*
Max. salt concentration in sample

Physical specifications

Analysis run time:
Sample volume:

DNA 1000 Assay

25–1000 bp
25–100 bp: 5 bp
100–500 bp: 5 %
500–1000 bp: 10 %
 \pm 10 %
5 % CV
20 % CV
25–500 bp: 15 % CV
500–1000 bp: 5 % CV
0.1 - 50 ng/ μ L
250 mM KCl or NaCl,
15 mM MgCl₂

30 minutes
1 μ L

DNA 7500 Assay

100–7500 bp
100–1000 bp: 5 %
1000–7500 bp: 10 %
 \pm 10 %
5 % CV
20 % CV
100-1000 bp: 10 % CV
1000-7500 bp: 5 % CV
0.1 - 50 ng/ μ L
250 mM KCl or NaCl,
15 mM MgCl₂

Number of samples:
Kit stability:

DNA 12000 Assay

100–12000 bp
100–1000 bp: 5 %
1000–12000 bp: 10 %
 \pm 15 %
5 % CV
25 % CV
100-1000 bp: 15 % CV
1000-12000 bp: 10 % CV
0.1 - 50 ng/ μ L
250 mM KCl or NaCl,
15 mM MgCl₂

12 samples/chip
4 months at 4 °C

*DNA ladder as sample.



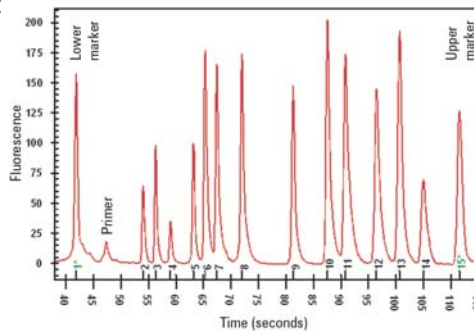
Select the right DNA kit for your analysis

DNA 1000 Assay

High resolution PCR fragment analysis

Ideally suited for:

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



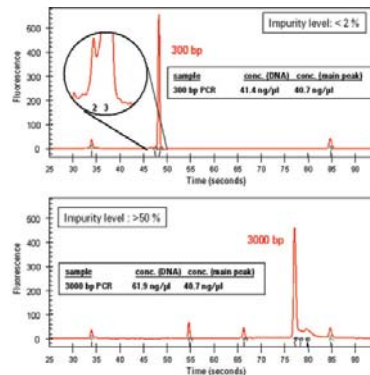
For comparative PCR it is important to get good resolution over the entire size range of PCR products. When analyzing a mixture of different PCR products, the DNA 1000 kit outperforms traditional slab gels. In addition, accurate quantitative data is obtained, which allows discrimination of minute differences in the amplified amounts. Example: High resolution multiplex PCR of 13 targets (99–955 bp). Data kindly provided by QIAGEN GmbH, Hilden, Germany.

DNA 7500 Assay

Impurity analysis of PCR products

Ideally suited for:

- PCR product analysis
- Optimization of PCR reactions
- Restriction digests of medium sized plasmids



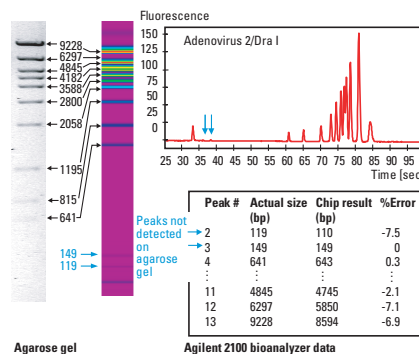
With the large linear dynamic range and sensitivity of LIF detection, it is possible to detect even minute amounts of impurities in PCR products. The precision of the PCR product quantification allows the optimization of the reaction, maximizing yield and minimizing cycle numbers.

DNA 12000 Assay

Analysis of restriction digests

Ideally suited for:

- Analysis of restriction digests



With traditional gel electrophoresis, it has always been difficult to detect both very small and large fragments together. Either small fragments run off the gel or large fragments don't separate well. Also, small fragments often do not stain or the large fragments are overexposed. The Agilent 2100 bioanalyzer and kits avoid such limitations. Choosing the pseudo-color representation of the gel-like image makes visualization of very faint bands possible.

Kits for the Agilent 2100 bioanalyzer are available for the analysis of DNA, RNA, proteins and cells.



To find out more call:

US/Canada
Phone: Toll-free 1-800 227 9770
Email: bioanalyzer_americas@agilent.com

Europe
Email: bioanalyzer_europe@agilent.com

Japan
Phone: 0422 56 9393
Email: lab_chip@agilent.com

Other Asia Pacific
Phone: +81 422 56 9392
Email: bioanalyzer_ap@agilent.com

www.agilent.com/chem/labonachip

Copyright © 2006 Agilent Technologies
All Rights Reserved. Reproduction, adaptation or translation without prior written permission is prohibited, except as allowed under the copyright laws.

Published March 1, 2006
Publication Number: 5989-4881EN