

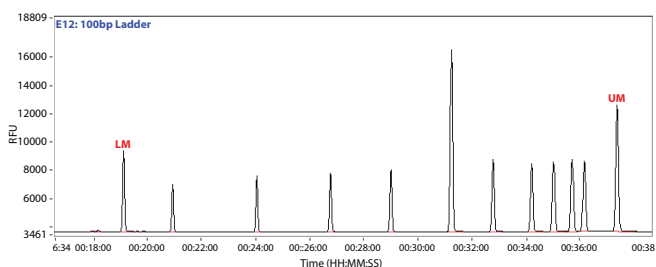
Microsatellite ANALYSIS

Fragment Analyzer™ Automated CE System

Fast, effective and accurate qualitative analysis of nucleic acids

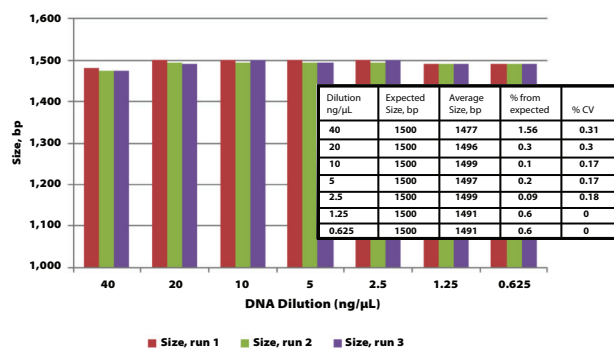
With slab gel methods, analysis of DNA fragments is time-consuming because of the manual labor involved with preparation of slab gels, and the human factor is error prone when trying to correctly call fragment sizes. Fragment Analyzer solves both problems. The instrument accelerates and automates electrophoresis, while dramatically improving the accuracy of genotyping analysis. It provides significantly higher sensitivity and fragment resolution than most slab gel methods, with results easily visualized. Because it has the ability to operate in either qualitative or quantitative mode – along with the option to analyze 12 or 96 samples simultaneously – the Fragment Analyzer's remarkable flexibility satisfies the needs of constantly evolving laboratories.

High resolution over a wide fragment range



Example separation of a 100 bp Ladder; with time scale, separated under normal run conditions (DNF-910 Gel Kit). Lower and Upper Alignment Markers and fragment sizes are shown.

High sizing accuracy



Serially diluted 1500 bp fragment. Sizing accuracy and precision over the wide dynamic concentration range is shown.

Versatility

The Fragment Analyzer™ can be used to analyze:

Microsatellites or other common repetitive sequences
 PCR amplicons
 Enzyme digested DNA fragments
 Plasmid (supercoiled and linear)
 Mutated DNA

For projects involving:

Genotyping
 Marker assisted selection/breeding
 Population mapping
 Identifying QTLs
 Cloned fragment identification/confirmation
 TiLLING & Eco-TiLLING
 Gene expression



From very small to very large fragments over a wide concentration range

dsDNA Reagent Kit, 35 bp – 500 bp, DNF-900

- Sizing Range: 35 bp – 500 bp (defined by lower/upper marker)
- Input Concentration Range: 0.5 ng/μL – 50 ng/μL (can be adjusted by dilution of sample)

dsDNA Reagent Kit, 35 bp – 1,500 bp, DNF-910

- Sizing Range: 35 bp – 1,500 bp (defined by lower/upper marker)
- Input Concentration Range: 0.5 ng/μL – 50 ng/μL (can be adjusted by dilution of sample)

dsDNA Reagent Kit, 35 bp – 5,000 bp, DNF-915

- Sizing Range: 35 bp – 5,000 bp (defined by lower/upper marker)
- Input Concentration Range: 0.5 ng/μL – 50 ng/μL (can be adjusted by dilution of sample)

dsDNA Reagent Kit, 75 bp – 15,000 bp, DNF-920

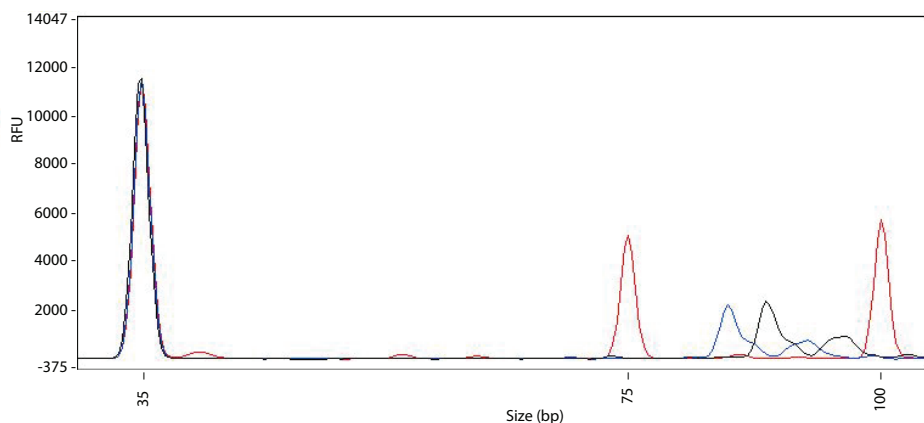
- Sizing Range: 75 bp – 15,000 bp (defined by lower/upper marker)
- Input Concentration Range: 0.5 ng/μL – 50 ng/μL (can be adjusted by dilution of sample)

dsDNA Reagent Kit, 75 bp – 20,000 bp, DNF-930

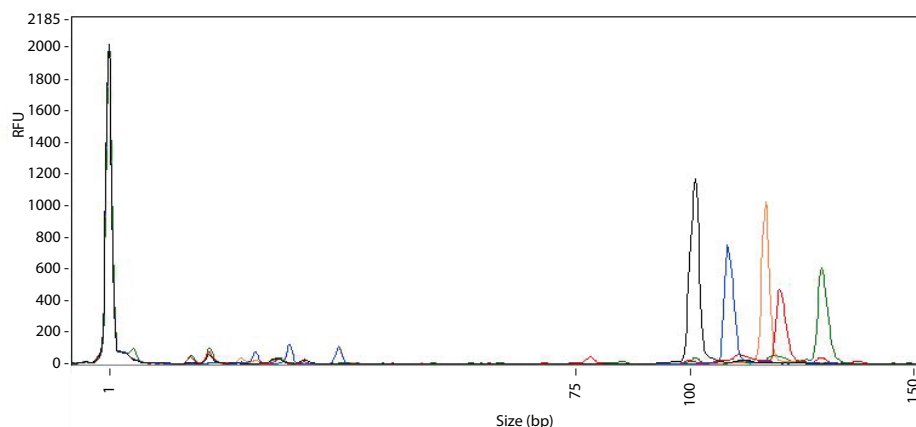
- Sizing Range: 75 bp – 20,000 bp (defined by lower/upper marker)
- Input Concentration Range: 0.5 ng/μL – 50 ng/μL (can be adjusted by dilution of sample)

With high resolution under 300 bp

Resolution of small fragments, 4 bp separation of main peaks



Resolution of fragment for KRAS/EGFR genes, 10 bp resolution



Features and Benefits

Room temperature stable reagents

Prepared kit components can be kept on instrument for up to 14 days.

Load multiple gels onto instrument

Seamlessly switch between different applications or fragment sizes. Reduces instrument down time.

Separate over wide fragment range

One instrument to handle very small fragments to very large fragments with tailored gel kits optimized for maximum resolution.

Attain High Sensitivity

With sensitivities down to 5pg/ μ L for a single fragment, cycle time or PCR reagent volume reduction may be realized.

Achieve high separation resolution and sizing accuracy

Confidently resolve small differences between fragments, as low as 2 bp under 300 bp size.

Automated Sample Handling

No repetitive pipetting steps, simply load samples in a 96-well plate or 12-well or 8-well strip tube.

Load few samples or many samples

Space to hold up to 288 samples (3 \times 96-well plates). Tray holders are accessible for sample loading during runs.

Powerful Data Analysis Software

PROSize 2.0™ automates post electrophoresis analysis. Digital data collection shows excellent details. The Flag Analysis (binning) feature outputs results in binary fashion, while the Overlay and Reporting features efficiently generate publication quality documents.

Advanced Analytical Technologies, Inc.

2711 South Loop Drive, Suite 4150
Ames, IA 50010 USA
Phone: +1-515-296-6600
Fax: +1-515-294-7141
E-mail: sales-fs@aati-us.com
www.aati-us.com

Advanced Analytical Technologies, GmbH.

Im Neuenheimer Feld 583
D-69120 Heidelberg
Phone: ++49 6221 868058-20
Fax: ++49 6221 868058-99
E-mail: sales-fs@aati-de.com
www.aati-de.com

