



# Fragment Analyzer™ Automated CE System

## Quick Start Guide – 12 Capillary

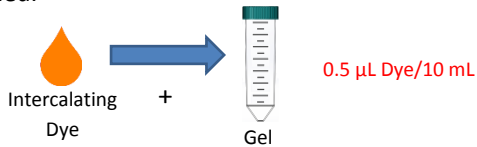
### DNF-900 dsDNA Reagent Kit

#### (35 bp - 500 bp)

DNF-900  
dsDNA Kit  
35 bp – 500 bp

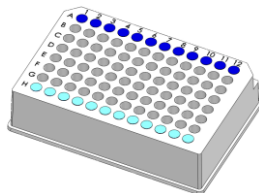
### Preparation:

- Mix fresh Gel and **Dye**. Refill 1X **Conditioning Solution** as needed.



- Place a fresh **1X Inlet Buffer** Tray on Fragment Analyzer.

Replace Capillary Storage Solution every 2-4 weeks  
1.1 mL/well

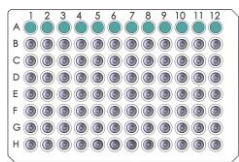


Replace Daily  
1.0 mL/well

● = Inlet Buffer  
● = Storage Solution

12-Cap Unit Fill Row A Only

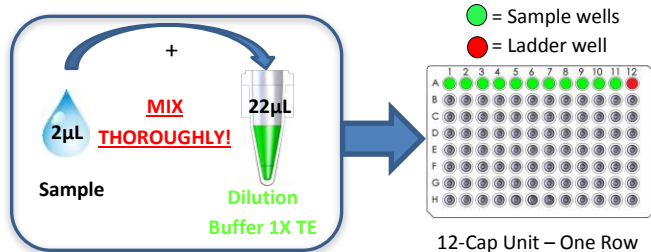
- Place **Marker** plate in Marker Drawer location.



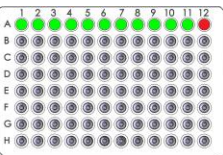
30 µL/well +  
**Mineral Oil Overlay**  
● = Marker

12-Cap Unit Fill Row A Only

- Mix **Samples** with **Dilution Buffer 1X TE** in Sample Plate. Place **24 µL of Ladder** ("ready to use"; no dilution) into **well 12** of each row of samples analyzed.



● = Sample wells  
● = Ladder well



12-Cap Unit – One Row  
Ladder Well 12

### Software

- Select Tray and Row to run for 12-Cap.
- Enter Sample ID and Tray ID (optional).
- Select "Add to Queue", select the **DNF-900-(22, 33 or 55) - DNA 35-500bp** method from the Dropdown menu.
- Enter Tray Name, Folder Prefix, and Notes (optional), Select **OK** to add Method to the Queue.
- Select to Start the Separation.

\*Please refer to the Kit User Manual for additional details.

### Reagents Required:

#### FA dsDNA Separation Gel, part # DNF-800

- Intercalating Dye, part # DNF-600-U030
- Capillary Storage Solution, part # GP-440-0100
- 5X 930 dsDNA Inlet Buffer, part # DNF-355 (Dilute to 1X)
- 5X Capillary Conditioning Solution, part # DNF-475 (Refill as needed)
- Dilution Buffer 1X TE, part # DNF-495
- 35 bp and 500 bp Markers, part # FS-SMK900
- 75-400 bp Range DNA Ladder, part # FS-SLR900
- Mineral Oil, part # FS-SMO15

\*Note: Color codes of Guide may not correlate with color codes of actual reagent component.

### Gel Guide:

For 12-capillary *Fragment Analyzer™* systems:

# of samples to be analyzed	Volume of Intercalating dye	Volume of Gel
12	0.5 µL	10 mL <sup>1</sup>
24	0.75 µL	15 mL
36	1.0 µL	20 mL
48	1.25 µL	25 mL
96	2.25 µL	45 mL

<sup>1</sup>A 5 mL minimum volume should be initially added to the tube.

### Specifications:

Specifications	Description
DNA Sizing Range	35 bp - 500 bp
Separation Resolution	8-10 bp @ 300 bp (22-47 Array) <sup>2</sup> ; 5-10 bp @ 300 bp (33-55 Array); 3-5 bp @ 300 bp (55-80 Array);
DNA Sizing Accuracy <sup>1</sup>	± 5% or better
DNA Sizing Precision <sup>1</sup>	2% CV
DNA Fragment Concentration Range <sup>1</sup>	0.5 ng/µL – 50 ng/µL input DNA (adjustable by dilution of sample)

<sup>1</sup>: Results using DNA Ladder or DNA Fragment standards initially prepared with 1X TE buffer

<sup>2</sup>: The 22 cm effective, 47 cm total length capillary array is only available for 12-capillary Fragment Analyzer™