



Fragment Analyzer™ Automated CE System

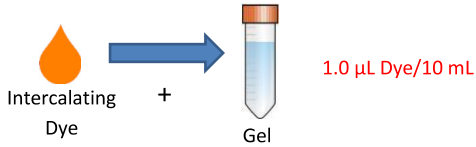
Quick Start Guide – 12 Capillary

DNF-474 High Sensitivity NGS Fragment Analysis Kit, (1 bp - 6,000 bp)

DNF-474
HS NGS
1 bp - 6000 bp

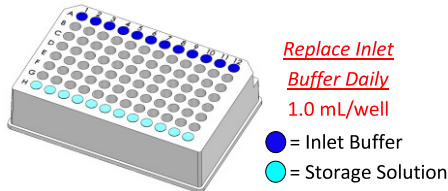
Preparation:

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



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

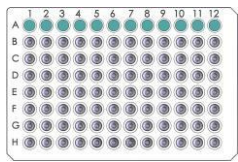
Replace Capillary Storage Solution every 2-4 weeks
1.0 mL/well



Replace Inlet Buffer Daily
1.0 mL/well

12-Cap Unit Fill Row A Only

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

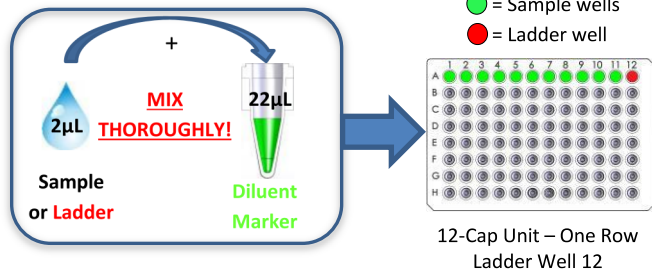


Replace Rinse Buffer Daily
200 µL/well

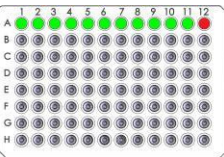
● = Rinse Buffer

12-Cap Unit Fill Row A Only

- Mix **Samples** or **Ladder** with **Diluent Marker** in Sample Plate, add 24 µL of **Blank Solution** to unused wells.



● = 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-474-(22, 33 or 55) - SS NGS Fragment 1-6000bp** 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:

- NGS Fragment Separation Gel, part # DNF-240
- Intercalating Dye, part # DNF-600-U030
- 5X 930 dsDNA Inlet Buffer, part # DNF-355 (Dilute to 1X)
- 5X Capillary Conditioning Solution, part # DNF-475 (Refill as needed)
- 0.25X TE Rinse Buffer, part # DNF-497
- High Sensitivity NGS Diluent Marker 1bp-6000bp, part # DNF-373
- High Sensitivity NGS Fragment DNA Ladder, part # DNF-396
- BF-25 Blank Solution, part # DNF-300
- Capillary Storage Solution, part # GP-440-0100 (sold separately)

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

Gel Guide:

For 12-capillary *Fragment Analyzer*™ systems: **in a 50 ml tube**

# of samples to be analyzed ¹	Volume of Intercalating dye	Volume of Gel
12	1.50 µL	15 mL
24	2.0 µL	20 mL
36	2.50 µL	25 mL
48	4.50 µL	45 mL

¹Typically one sample well per separation is dedicated to the ladder

Specifications:

Specifications	Description
DNA Sizing Range	25 bp - 5,000 bp
Separation Resolution	25 bp - 100 bp ≤ 10%; 100 bp - 2000 bp ≤ 5%; 2000 bp - 5000 bp ≤ 10%;
DNA Sizing Accuracy	± 5% or better
DNA Sizing Precision	2% CV
DNA Fragment Concentration Range	5 pg/µL to 500 pg/µL input DNA
DNA Smear Concentration Range	50 pg/µL to 5,000 pg/µL input DNA
DNA Quantification Accuracy	± 25%
DNA Quantification Precision	15% CV
Maximum DNA Concentration	500 pg/µL per fragment; 5 ng/µL total

When run is over, make sure caps are in storage solution before shutting down. Analyze run with ProSize Software.