

Agilent HS Genomic DNA 50 kb Kit

5200 Fragment Analyzer System

Quick Guide

For Research Use Only.

Not for use in diagnostic procedures.

Kit Specifications	1
Kit Components.....	2
Analysis Protocol	2
Gel Preparation.....	2
Instrument and Sample Preparation	2
Fragment Analyzer Software Operating Procedure	4
Technical Support and Further Information.....	4

Kit Specifications

Specifications	Description
DNA sizing range	75 bp – 60,000 bp
gDNA concentration range ¹	300 pg/μL – 12 ng/μL
gDNA quantification precision ¹	25% CV
gDNA quantification accuracy ¹	± 30%
Maximum DNA concentration	12 ng/μL

¹ Using human blood genomic DNA (Coriell #NA19238) in 1x TE Buffer as sample

Kit Components

Agilent HS Genomic DNA 50 kb kit (DNF-468)

Part Number	Name
DNF-270	Genomic DNA Separation Gel
DNF-600-U030	Intercalating Dye
DNF-355	5x 930 dsDNA Inlet Buffer (Dilute to 1x)
DNF-475	5x Capillary Conditioning Solution (Dilute to 1x)
DNF-375	HS Genomic DNA Diluent Marker
DNF-364	HS Extended Genomic DNA Ladder
DNF-497	0.25x TE Rinse Buffer
DNF-300	BF-25 Blank Solution
GP-440-0100	Capillary Storage Solution (sold separately)

Analysis Protocol

Gel preparation

Prepare gel/dye mixture for 5200 Fragment Analyzer system:

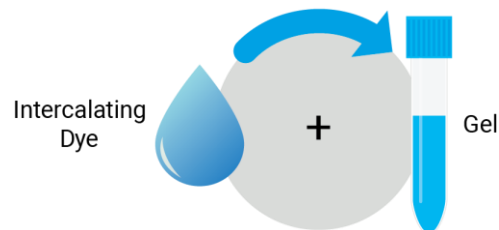
# of samples to be analyzed ¹	Volume of Intercalating Dye	Volume of gel
12	1.0 µL	10 mL
24	1.5 µL	15 mL
36	2.0 µL	20 mL
48	2.5 µL	25 mL
96	4.5 µL	45 mL

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

Instrument and sample preparation

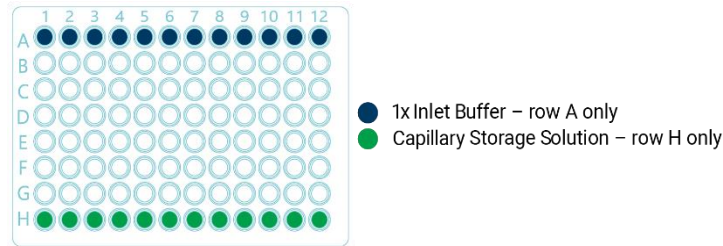
- 1 Mix fresh gel and dye. Refill 1x Capillary Conditioning Solution as needed.

1.0 µL dye / 10 mL gel

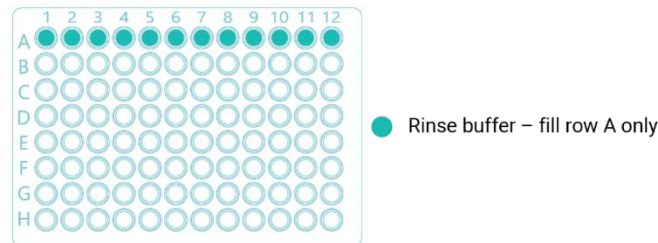


- 2 Place a fresh 1x 930 dsDNA Inlet Buffer tray on the Fragment Analyzer system. Fill row A (1.0 mL/well). Replace 1x 930 dsDNA Inlet Buffer daily.

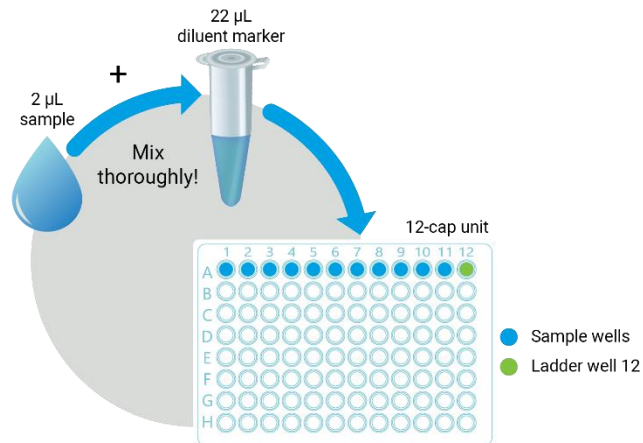
- Place Capillary Storage Solution in row H (1.0 mL/well). Replace Capillary Storage Solution every 2-4 weeks.



- Place 0.25x TE Rinse Buffer plate in marker drawer location. Fill row A (200 μ L/well). Replace 0.25x TE Rinse Buffer daily.



- Mix samples with HS Genomic DNA Diluent Marker in sample plate. Add 24 μ L of BF-25 Blank Solution to unused wells. Add 2 μ L HS Extended Genomic DNA Ladder to 22 μ L of HS Genomic DNA Diluent Marker in separate tube. Vortex to mix and pipette mixture into ladder well.




WARNING

Working with Chemicals

The handling of reagents and chemicals might hold health risks.

- Refer to product material safety datasheets for further chemical and biological safety information.
- Follow the appropriate safety procedures such as wearing goggles, safety gloves and protective clothing

Fragment Analyzer software operating procedure

- 1 Select **Tray** and **Row** to run for 12-Cap.
- 2 Enter **Sample ID** and **Tray ID** (optional).
- 3 Select **Add to Queue**, select the **DNF-468-(22 or 33) – HS Genomic DNA 50Kb** method from the dropdown menu.
- 4 Enter **Tray Name**, **Folder Prefix**, and **Notes** (optional).
- 5 Select **OK** to add method to the queue.
- 6 Select  to start the separation.

NOTE

Please refer to the Kit Guide for additional details.

Technical Support and Further Information

For technical support, please visit www.agilent.com.

It offers useful information, support and current developments about the products and technology.

www.agilent.com

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