

Agilent HS RNA Kit (15 nt)

5200 Fragment Analyzer System

Quick Guide

For Research Use Only.

Not for use in diagnostic procedures.

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Kit Specifications

Specifications	Description
RNA sizing range	200 nt – 6,000 nt
RNA sizing accuracy ¹	± 20% (Total RNA and mRNA)
RNA sizing precision ¹	20% CV (Total RNA and mRNA)
Limit of detection	50 pg/μL (Total RNA); 250 pg/μL (mRNA)
Quantitative range (per smear)	50 pg/μL to 5,000 pg/μL (Total RNA); 250 pg/μL to 5,000 pg/μL (mRNA)
RNA quantification accuracy ¹	± 30%
RNA quantification precision ¹	20% CV

¹ Using RNA Ladder as sample.

Kit Components

Agilent HS RNA kit, 15 nt (DNF-472)

Part Number	Name
DNF-265	RNA 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-497	0.25x TE Rinse Buffer
DNF-370	HS RNA Diluent Marker (15 nt)
DNF-386	HS RNA Ladder
DNF-301	BF-1 Blank Solution
GP-440-0100	Capillary Storage Solution (sold separately)

Analysis Protocol

Gel preparation

Prepare gel/dye mixture for 5200 Fragment Analyzer system:

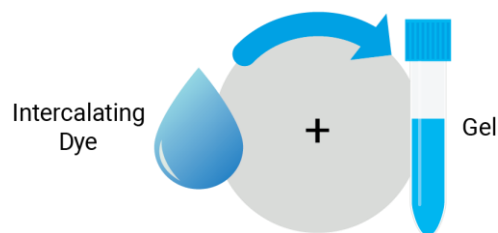
# of samples to be analyzed ¹	Volume of Intercalating Dye	Volume of gel
12	1.0 µL	10 mL
24	1.5 µL	15 mL
36	2.0 µL	20 mL
48	2.5 µL	25 mL
96	4.5 µL	45 mL

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

Instrument and sample preparation

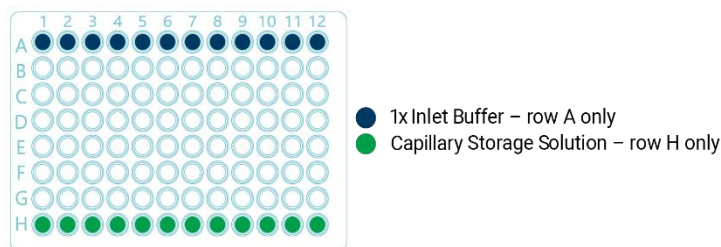
- 1 Mix fresh gel and dye. Refill 1x Capillary Conditioning Solution as needed.

1.0 µL dye / 10 mL gel

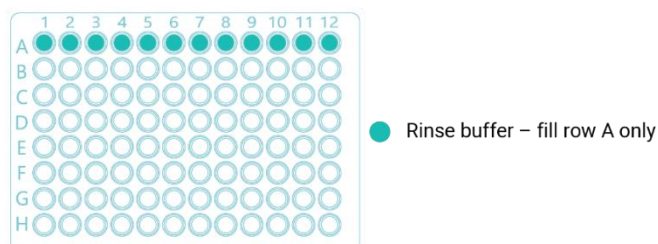


- 2 Place a fresh 1x 930 dsDNA Inlet Buffer tray on the 5200 Fragment Analyzer system. Fill row A (1.0 mL/well). Replace 1x 930 dsDNA Inlet Buffer daily.

- 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.

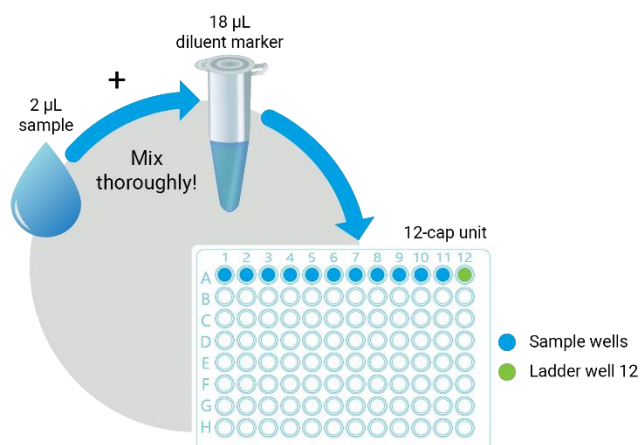


- Dilute the as received HS RNA Ladder to a working concentration of 2 ng/ μ L*.

NOTE

*Initial step done when using as received HS RNA Ladder aliquot for the first time only. Proceed to Step 6 if already completed.

- Heat denature samples and HS RNA Ladder at 70°C for 2 minutes, immediately cool to 4°C and keep on ice before use.
- Mix samples or HS RNA Ladder with HS RNA Diluent Marker (15 nt) in sample plate. Add 20 μ L of BF-1 Blank Solution to any unused wells of the row to be analyzed.




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-472(M or T)-(22, 33 or 55) HS Total RNA (or mRNA) 15nt** 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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Edition 12/18



M5310-92472

