



Agilent CRISPR Discovery Gel Kit

5300 Fragment Analyzer System

48-Capillary Array

Quick Guide

For Research Use Only.

Not for use in diagnostic procedures.

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Kit Specifications

Specifications	Description
DNA sizing range	100 bp – 6,000 bp
Separation resolution	8 bp @ 500 bp (33-55 Array)
DNA sizing precision ¹	2% CV
DNA sizing accuracy ¹	± 5% or better
DNA fragment concentration range	0.005 ng/μL – 2 ng/μL input DNA (adjustable by dilution of sample)

¹ Results using DNA ladder or DNA fragment standards initially prepared with 1x TE buffer

Kit Components

Agilent CRISPR Discovery Gel kit

Part Number	Name
DNF-810	dsDNA 810 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)
FA-MRK915F-0003	Markers, 1 bp & 6000 bp
FS-SLR480-0001	MDK DNA Ladder
DNF-494	Dilution Buffer 0.1x TE
FS-SMO15	Mineral Oil Dropper Bottle
GP-440-0100	Capillary Storage Solution (sold separately)

Analysis Protocol

Gel preparation

Prepare gel/dye mixture for 5300 (48-Capillary) Fragment Analyzer system:

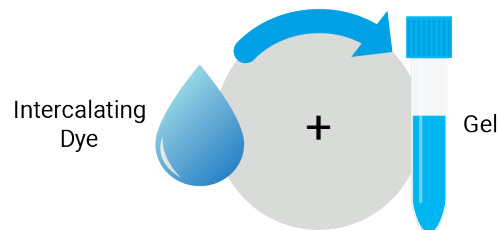
# of samples to be analyzed ¹	Volume of Intercalating Dye	Volume of gel
48	2.5 µL	25 mL
96	4.0 µL	40 mL
144	5.5 µL	55 mL
192	7.0 µL	70 mL
240	8.5 µL	85 mL

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

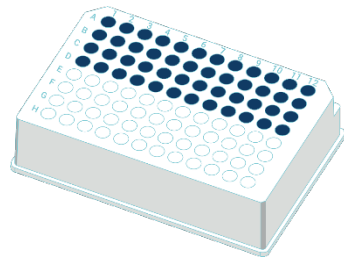
Instrument and sample preparation

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

1.0 µL dye / 10 mL gel

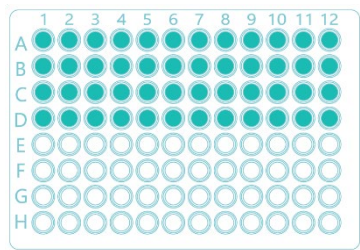


- Place a fresh 1x 930 dsDNA Inlet Buffer tray on the 5300 Fragment Analyzer system. Fill row A-D (1.0 mL/well). Replace 1x 930 dsDNA Inlet Buffer daily.



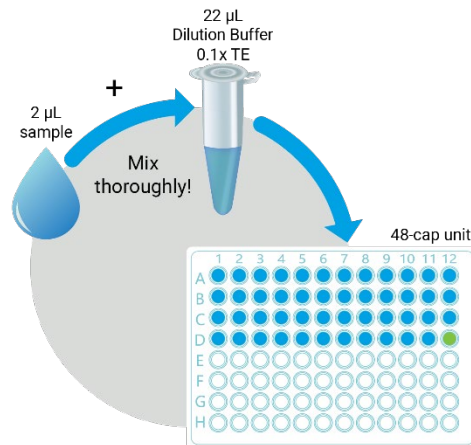
● 1x 930 dsDNA Inlet Buffer – fill rows A-D only

- Place Capillary Storage Solution in sample tray 3. Fill row A-D (100 μ L/well). Replace Capillary Storage Solution every 2-4 weeks.
- Place marker plate in marker drawer location. Fill row A-D (30 μ L/well + mineral oil overlay).



● Marker – fill rows A-D only

- Mix samples with Diluent Buffer 0.1x TE in sample plate. Place 24 μ L of MDK DNA Ladder (“ready to use”; no dilution) into well D12 or H12.



● Sample wells
● Ladder well D12 or H12


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 **Group** to run for 48-Cap.
- 2 Enter **Sample ID** and **Tray ID** (optional).
- 3 Select **Add to Queue**, select the **CRP-910-(33 or 55) – CRISPR Discovery** 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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