

# Agilent CRISPR Discovery Gel Kit 5200 Fragment Analyzer System

# **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             | 10 bp @ 500 bp (22-47 Array) <sup>2</sup><br>8 bp @ 500 bp (33-55/55-80 Array) |  |
| DNA sizing precision <sup>1</sup> | 2% CV  |  |
| DNA sizing accuracy <sup>1</sup>  | ± 5% or better   |  |
| DNA fragment concentration range  | 0.005 ng/μL – 2 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 system.

## **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-SM015        | Mineral Oil Dropper Bottle                        |  |
| GP-440-0100     | Capillary Storage Solution (sold separately)      |  |

## **Analysis Protocol**

#### Gel preparation

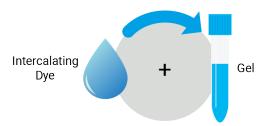
Prepare gel/dye mixture for 5200 Fragment Analyzer system:

| # of samples to be analyzed1 | Volume of Intercalating Dye | Volume of gel      |
|------------------------------|-----------------------------|--------------------|
| 12                           | 1.0 μL                      | 10 mL <sup>1</sup> |
| 24                           | 1.5 μL                      | 15 mL              |
| 36                           | 2.0 μL                      | 20 mL              |
| 48                           | 2.5 μL                      | 25 mL              |
| 96                           | 4.5 μL                      | 45 mL              |

<sup>&</sup>lt;sup>1</sup> Typically one sample well per separation is dedicated to the ladder.

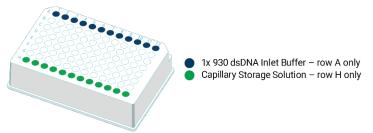
#### Instrument and sample preparation

1 Mix fresh gel and dye. Refill 1x Capillary Conditioning Solution as needed.  $1.0 \,\mu L$  dye /  $10 \,mL$  gel

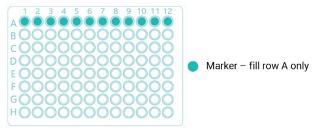


2 Place a fresh 1x 930 dsDNA Inlet Buffer tray on the 5200 Fragment Analyzer system. Fill row A (1.0 mL/well). Replace 1x 930 dsDNA Inlet Buffer daily.

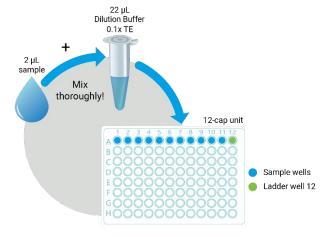
**3** Place Capillary Storage Solution in row H (1.0 mL/well). Replace Capillary Storage Solution every 2-4 weeks.



4 Place marker plate in marker drawer location. Fill row A (30 μL/well + mineral oil overlay).



5 Mix samples with Diluent Buffer 0.1x TE in sample plate. Place  $24 \mu L$  of MDK DNA Ladder ("ready to use"; no dilution) into well 12 of each row of samples 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 CRP-910-(22, 33 or 55) CRISP 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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