1. Mix fresh Gel and Diluent Marker. Refill 1X Conditioning Solution as needed.

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

3. Place Rinse Buffer plate in Marker Drawer location.

4. Heat denature Samples and Ladder at 70°C for 10 minutes, immediately cool to 4°C and keep on ice before use.

5. Mix Samples or Ladder with Diluent Marker in Sample Plate, add 20 µL of Blank Solution to unused wells.

Software
1. Select Tray and Row to run for 96-Cap.
2. Enter Sample ID and Tray ID (optional).
3. Select “Add to Queue”, select the DNF-470-33 – Small RNA method from the Dropdown menu.
4. Enter Tray Name, Folder Prefix, and Notes (optional), Select OK to add Method to the Queue.
5. Select to Start the Separation.

*Please refer to the Kit User Manual for additional details.

Reagents Required:
- Small RNA Separation Gel, part # DNF-262
- Intercalating Dye, part # DNF-600-U030
- SX 930 dsDNA Inlet Buffer, part # DNF-355 (Dilute to 1X)
- SX Capillary Conditioning Solution, part # DNF-475 (Refill as needed)
- 0.25X TE Rinse Buffer, part # DNF-497
- Small RNA Diluent Marker, part # DNF-368
- Small RNA Ladder, part # DNF-366
- BF-25 Blank Solution, part # DNF-300
- Capillary Storage Solution, part # GP-440-0100 (purchased separately)

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

Gel Guide:
For 96-capillary Fragment Analyzer™ systems:

<table>
<thead>
<tr>
<th># of Samples to be Analyzed</th>
<th>Volume of Intercalating Dye</th>
<th>Volume of Gel</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>4.0 µL</td>
<td>40 mL</td>
</tr>
<tr>
<td>192</td>
<td>8.0 µL</td>
<td>80 mL</td>
</tr>
</tbody>
</table>

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

Specifications:

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RNA Sizing Range</td>
<td>5 – 200 nt</td>
</tr>
<tr>
<td>Qualitative Range</td>
<td>25 pg/µL - 2500 pg/µL (microRNA Region)</td>
</tr>
<tr>
<td>Quantitative Range</td>
<td>50 pg/µL - 2000 pg/µL (microRNA Region)</td>
</tr>
<tr>
<td>Quantification Precision</td>
<td>25% CV (Small RNA Ladder)</td>
</tr>
</tbody>
</table>