Applied Biosystems 3730 DNA Analyzer

Specifications

<table>
<thead>
<tr>
<th>Run Module</th>
<th>Capillary Length to Detector (cm)</th>
<th>Runs/Day</th>
<th>Phred Q20 Bases/Read</th>
<th>Phred Q20 Bases/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid</td>
<td>36</td>
<td>40</td>
<td>550</td>
<td>500</td>
</tr>
<tr>
<td>Standard</td>
<td>35</td>
<td>24</td>
<td>700</td>
<td>650</td>
</tr>
<tr>
<td>Long Read</td>
<td>50</td>
<td>12</td>
<td>&gt; 1,000</td>
<td>&gt; 870</td>
</tr>
</tbody>
</table>

*98.5% basecalling accuracy, less than 2% N's, using pGEM-3Zf(+) as template.

Production Capacity: Fragment Analysis

Linkage mapping applications with Applied Biosystems LMS v 2.5 Kit (customized PET™ oligos for 5-dye analysis)

<table>
<thead>
<tr>
<th>Dye Set</th>
<th>Capillary Separation Distance (cm)</th>
<th>Runs/Day</th>
<th>Samples/Day</th>
<th>Genotypes/Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>G5</td>
<td>36</td>
<td>40</td>
<td>1,920</td>
<td>38,400*</td>
</tr>
</tbody>
</table>

*A assumes 20 Genotypes per sample

Capillary Arrays and Separation Matrix

<table>
<thead>
<tr>
<th>Capillary Separation Distance (cm)</th>
<th>Dimensions</th>
<th>Polymer consumed/run</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>150 µm o.d./50 µm i.d.</td>
<td>Approx. 100 µL</td>
</tr>
<tr>
<td>50</td>
<td>150 µm o.d./50 µm i.d.</td>
<td>Approx. 125 µL</td>
</tr>
</tbody>
</table>

Reagents

- BigDye® Terminator v 1.1
- BigDye® Terminator v 3.0
- BigDye® Terminator v 3.1
- Linkage Mapping Sets v 2.5

Instrument configuration

- CE Instrument
- Computer and Flat Panel Monitor
- Installation Chemistry and Accessories
- Collection and Analysis Software

Computer Specifications

- Base Unit: Pentium® IV Processor 2.00 GHz/400 MHz
- Memory: 1 GB, PC 800 @ 400 MHz
- Hard Drive: 72 GB
- Monitor: 17” Flat Panel
- DVD-ROM Drive

Integrated Plate Stacker

- Houses 16 sample plates at any time
- Accommodates 96-well and 384-well plates
- Accessible any time except when autosampler is moving

Sample Volumes

- For 384-Well Sample Plates: 5-30 µL
- For 96-Well Sample Plates: 10-50 µL

Plate Seal

- Septa
- Polypropylene heat seal (automatic onboard piercing)

Laser

Argon-ion multi-line, single mode laser: primary excitation lines 488 and 514.5 nm.

Operating Environment

- Ambient temperature: 18 °C to 30 °C
- Humidity: 20 to 80% (non-condensing)

Oven Temperature

Active temperature control between 18°C to 70°C

Electrical

- Main Power: 200-220 V or 230-240 V +/-10%, 50/60 Hz
- Power Rating: Maximum input of 2500 VA
- Circuit Current: Maximum of 15 amps. The instrument requires a 30 amp receptacle to match one of the two power cord configurations that ship with the system. The electrical receptacle must be located within 3 m (10 ft.) of the back