E-Gel® Low Range Quantitative DNA Ladder
Cat. No. 12373-031 Conc. 175 ng/10 µl

Introduction
The E-Gel® Low Range Quantitative DNA Ladder is designed for use as a molecular weight standard and for estimating the amount of DNA. The important features of the ladder are listed below:
- Consists of five linear double-strand DNA fragments (100-2000 bp)
- Suitable for estimating molecular weight and quantity of DNA fragments in agarose gel electrophoresis
- Provided in a ready-to-use format
- Visualized by ethidium bromide staining

Specifications
Contents: 1 ml of E-Gel® Low Range Quantitative DNA Ladder. Sufficient ladder is provided for 100 applications.
Storage Buffer: 8 mM Tris-HCl, pH 7.5; 1 mM EDTA; 5% glycerol; and 0.005% Orange G.
Storage: Store at room temperature or 4°C.

Directions for Use
The E-Gel® Low Range Quantitative DNA Ladder is provided in a ready-to-use format. There is no need to heat the ladder prior to loading. Use loading volumes listed below to obtain the best results:

<table>
<thead>
<tr>
<th>Gel Type</th>
<th>Ladder</th>
<th>Water</th>
<th>Total Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard agarose</td>
<td>10 µl</td>
<td>--</td>
<td>10 µl</td>
</tr>
<tr>
<td>E-Gel® 96</td>
<td>10 µl</td>
<td>10 µl</td>
<td>20 µl</td>
</tr>
<tr>
<td>E-Gel® double comb</td>
<td>5 µl</td>
<td>5 µl</td>
<td>10 µl</td>
</tr>
<tr>
<td>Marker lane</td>
<td>10 µl</td>
<td>10 µl</td>
<td>20 µl</td>
</tr>
<tr>
<td>Sample lane</td>
<td>10 µl</td>
<td>10 µl</td>
<td>20 µl</td>
</tr>
<tr>
<td>E-Gel® single comb</td>
<td>10 µl</td>
<td>10 µl</td>
<td>20 µl</td>
</tr>
</tbody>
</table>

Part No. 12373031.PPS Doc. Rev. 081602
Example

10 µl of E-Gel® Low Range Quantitative DNA Ladder was diluted with 10 µl of water and loaded onto a 2% E-Gel® double comb gel (see figure below). Electrophoresis of 10 µl of the ladder results in bands containing 100, 40, 20, 10, and 5 ng of DNA, respectively.

Product Qualification

Agarose gel analysis must clearly show all bands (2000, 800, 400, 200, and 100 bp). Sharpness, relative intensity, and absence of background are evaluated relative to a control lot by agarose gel analysis.

Limited Use Label License No. 40: DNA Mass Ladder

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