

## 50bp DNA Ladder

REF: EG21902-S/M

### Storage Condition

Store at 4°C for 6 months, and store at -20°C for long-term storage.

### Components

Component	EG321902S	EG321902M
50bp DNA Ladder	250 µl	5×250 µl

### Description

50bp DNA Ladder is provided with 1× Loading Buffer for tracking of sample DNA migration, contains 14 fragments: 50 bp, 100 bp, 150 bp, 200 bp, 250 bp, 300 bp, 350 bp, 400 bp, 500 bp, 600 bp, 700 bp, 800 bp, 900 bp and 1000 bp. 5 µl of this product contains ~40 ng of each band, except the 500 bp and 250 bp fragment which contains ~100 ng.

The product can be stably stored at room temperature during normal usage without degradation and dispersion. The ladder is designed with a uniform intensity of DNA bands for a clear view of each band. An exact amount of DNA in each band allows approximate quantification of DNA samples.

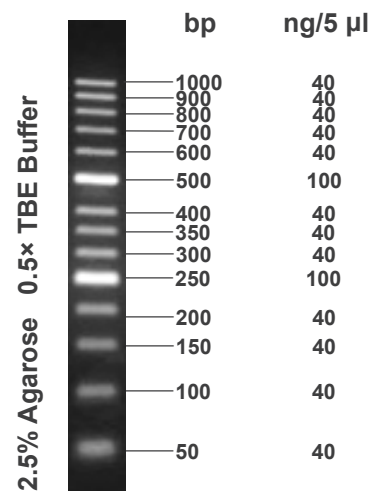
### Notice

1. The product is pre-mixed with 1× loading buffer and tracking dyes, and can be directly loaded for electrophoresis.
2. Recommended gel concentration range: 2~3% TAE agarose. A higher concentration agarose gel will increase bands resolution. TBE can be used instead of TAE, and the separation could be improved too.
3. When performing electrophoresis using an agarose gel containing Safe Red DNA Stain, the bromophenol blue tracking band should migrate to approximately 2/3 of the gel length.

### Protocol

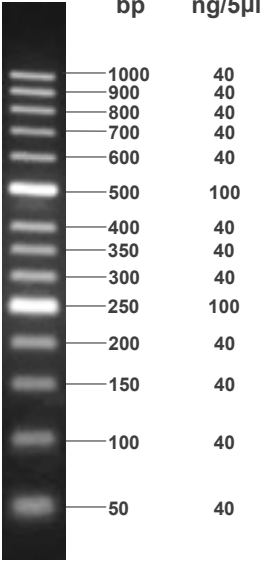
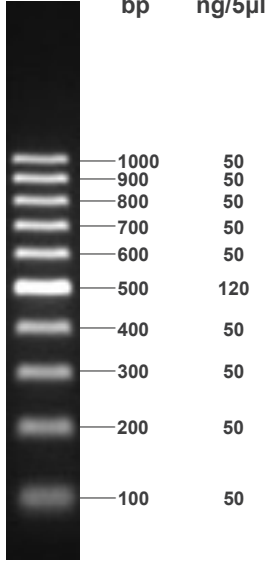
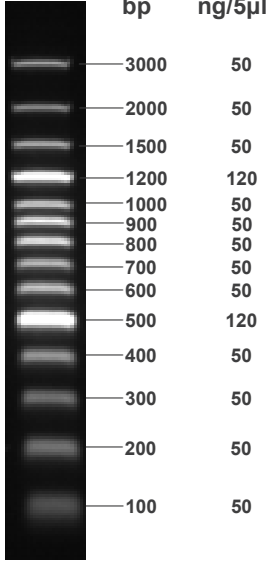
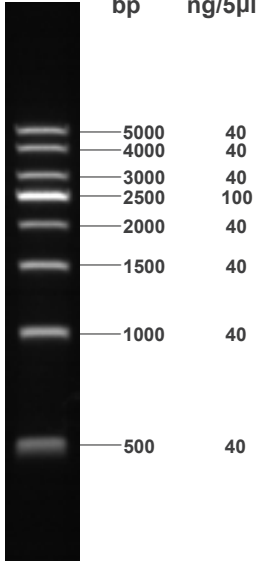
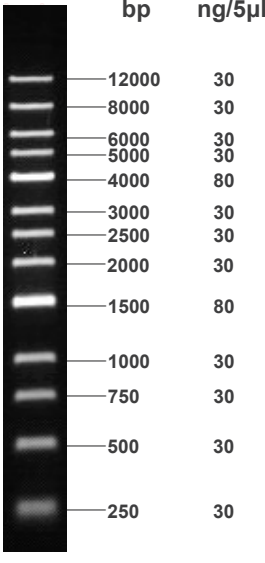
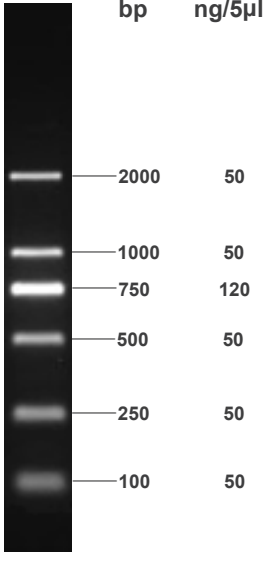
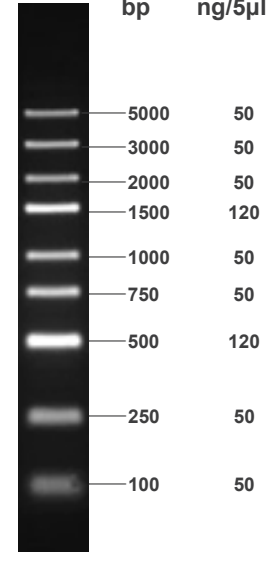
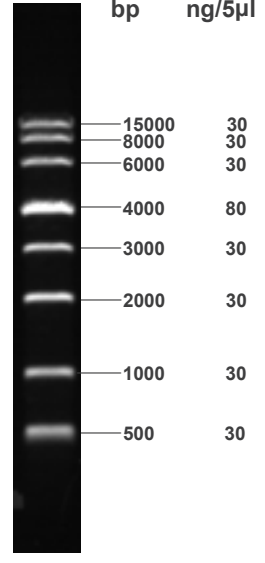
1. We recommend loading 5 µl of 50bp DNA Ladder per gel lane (Adjust the sample volume according to the width of combs).
2. Using a 2~3% Agarose (REF: EG20910) gel, or 5% PAGE gel, and electrophorese in 1× TAE or 0.5× TBE buffer, with the voltage set to 5~10 V/cm. It is important to use fresh gel & buffer.
3. Using Safe Red DNA Stain (REF: CP18106S) or other nucleic acid stains for gel staining, then observe the bands under UV light.

### Result Display



5 µl/lane

7 V/cm, 50 min

 <p><b>2.5% Agarose 0.5x TBE Buffer</b></p> <p>bp ng/5µl</p> <p>1000 40 900 40 800 40 700 40 600 40 500 100 400 40 350 40 300 40 250 100 200 40 150 40 100 40 50 40</p> <p>5 µl/lane 7 V/cm, 50 min</p>	 <p><b>1.5% Agarose 0.5x TBE Buffer</b></p> <p>bp ng/5µl</p> <p>1000 50 900 50 800 50 700 50 600 50 500 120 400 50 300 50 200 50 100 50</p> <p>5 µl/lane 7 V/cm, 40 min</p>	 <p><b>1.5% Agarose 0.5x TBE Buffer</b></p> <p>bp ng/5µl</p> <p>3000 50 2000 50 1500 50 1200 120 1000 50 900 50 800 50 700 50 600 50 500 120 400 50 300 50 200 50 100 50</p> <p>5 µl/lane 7 V/cm, 45 min</p>	 <p><b>1.4% Agarose 1x TAE Buffer</b></p> <p>bp ng/5µl</p> <p>5000 40 4000 40 3000 40 2500 100 2000 40 1500 40 1000 40 500 40</p> <p>5 µl/lane 7 V/cm, 45 min</p>
<p><b>50bp DNA Ladder</b></p>	<p><b>100bp DNA Ladder</b></p>	<p><b>100bp Plus DNA Ladder</b></p>	<p><b>500bp DNA Ladder</b></p>
<p><b>EG21902S/M</b></p>	<p><b>EG21903S/M</b></p>	<p><b>EG21908S/M</b></p>	<p><b>EG21907S/M</b></p>
 <p><b>0.7% Agarose 1x TAE Buffer</b></p> <p>bp ng/5µl</p> <p>12000 30 8000 30 6000 30 5000 30 4000 80 3000 30 2500 30 2000 30 1500 80 1000 30 750 30 500 30 250 30</p> <p>5 µl/lane 7 V/cm, 45 min</p>	 <p><b>1.2% Agarose 1x TAE Buffer</b></p> <p>bp ng/5µl</p> <p>2000 50 1000 50 750 120 500 50 250 50 100 50</p> <p>5 µl/lane 8 V/cm, 25 min</p>	 <p><b>1.2% Agarose 1x TAE Buffer</b></p> <p>bp ng/5µl</p> <p>5000 50 3000 50 2000 50 1500 120 1000 50 750 50 500 120 250 50 100 50</p> <p>5 µl/lane 7 V/cm, 30 min</p>	 <p><b>0.7% Agarose 1x TAE Buffer</b></p> <p>bp ng/5µl</p> <p>15000 30 8000 30 6000 30 4000 80 3000 30 2000 30 1000 30 500 30</p> <p>5 µl/lane 7 V/cm, 40 min</p>
<p><b>1kb DNA Ladder</b></p>	<p><b>FY2000 DNA Marker</b></p>	<p><b>FY5000 DNA Marker</b></p>	<p><b>FY15000 DNA Marker</b></p>
<p><b>EG21909S/M</b></p>	<p><b>EG21910S/M</b></p>	<p><b>EG21911S/M</b></p>	<p><b>EG21912S/M</b></p>