

**CERTIFICATE OF ANALYSIS**

**O'GeneRuler™  
1kb DNA Ladder Plus,  
ready-to-use**

**#SM1343** 250 (5x50)µg (for 500 applications)

**Lot:**

Concentration: 0.1µg/µl

Supplied with: 2x1ml 6X Orange Loading Dye Solution

**Store: at room temperature or at +4°C for periods up to 6 months.**

**For longer periods store at -20°C.**

In total 7 vials.

**Description**

O'GeneRuler™ 1kb DNA Ladder Plus, ready-to-use, is designed for the sizing and quantification of DNA fragments in agarose gels.

The Ladder is composed of fifteen chromatography-purified individual DNA fragments (in base pairs): 20000, 10000, 7000, 5000, 4000, 3000, 2000, 1500, 1000, 700, 500, 400, 300, 200, 75. It contains three reference bands (5000, 1500 and 500 bp) for easy orientation.

The Ladder is ready-to-use – it is premixed with the 6X Orange Loading Dye Solution for direct loading on gel.

**Storage and Loading Buffer**

10mM Tris-HCl (pH 7.6), 10mM EDTA, 0.025% orange G, 0.005% xylene cyanol FF and 10% glycerol.

**6X Orange Loading Dye Solution**

10mM Tris-HCl (pH 7.6), 0.15% orange G, 0.03% xylene cyanol FF, 60% glycerol and 60mM EDTA.

**QUALITY CONTROL ASSAY DATA**

Well-defined bands are formed during agarose gel electrophoresis.

The absence of nucleases is confirmed by a direct nuclease activity assay.

**Quality authorized by:**



Jurgita Zilinskiene

## Protocol For Loading

**Step 1:** Mix gently

**Step 2:** Load 1µl per 1mm gel lane

## Recommendations

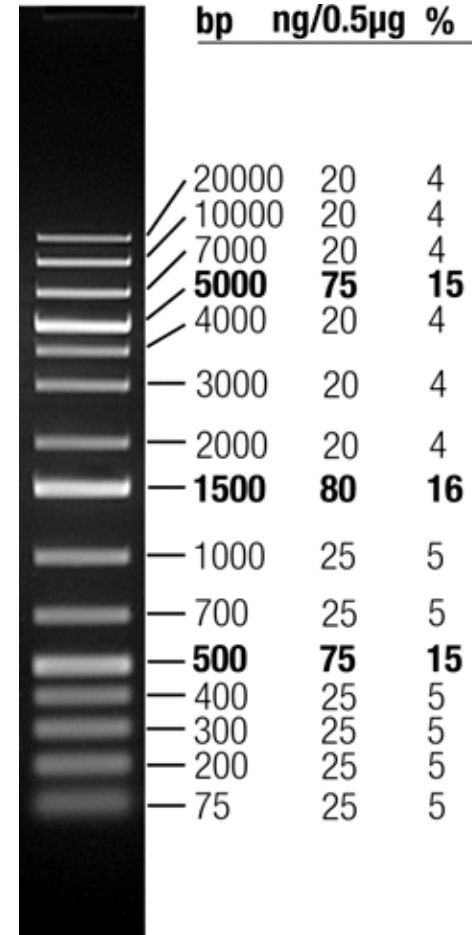
- Do not heat before loading.
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- Dilute your DNA sample with the 6X Orange Loading Dye Solution (#R0631, supplied with the Ladder): mix 1 volume of the dye solution with 5 volumes of the DNA sample;
- Load the same volumes of the DNA sample and the DNA Ladder;
- For quantification, adjust the concentration of the sample to equalize it approximately with the amount of DNA in the nearest band of the Ladder.
- Visualize DNA by staining with ethidium bromide or with SYBR<sup>®</sup> Green I.
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### **PRODUCT USE LIMITATION.**

This product is developed, designed and sold exclusively *for research purposes and in vitro use only*. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Please refer to [www.fermentas.com](http://www.fermentas.com) for Material Safety Data Sheet of the product.

## O'GeneRuler™ 1kb Plus DNA Ladder, ready-to-use



1% TopVision™ LE GQ Agarose (#R0491),  
0.5µg/lane, 8cm length gel, 1X TAE, 7V/cm, 45min