

CERTIFICATE OF ANALYSIS

GeneRuler™
1kb DNA Ladder Plus

#SM1331 250 (5x50)µg (for 500 applications)

Lot:

Concentration: 0.5µg/µl
Supplied with: 2x1ml 6X Loading Dye Solution

Store at -20°C.

In total 7 vials.

Description

GeneRuler™ 1kb DNA Ladder Plus 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 dissolved in TE buffer.

Storage Buffer (TE buffer)

10mM Tris-HCl (pH 7.6), 1mM EDTA.

6X Loading Dye Solution

10mM Tris-HCl (pH 7.6), 0.03% bromophenol blue, 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

Prepare a loading mixture for the 5mm agarose gel lane*:

DNA Ladder	1 μ l
6X Loading Dye Solution	1 μ l
Deionized water	4 μ l
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	6 μ l

Step 1: Mix gently

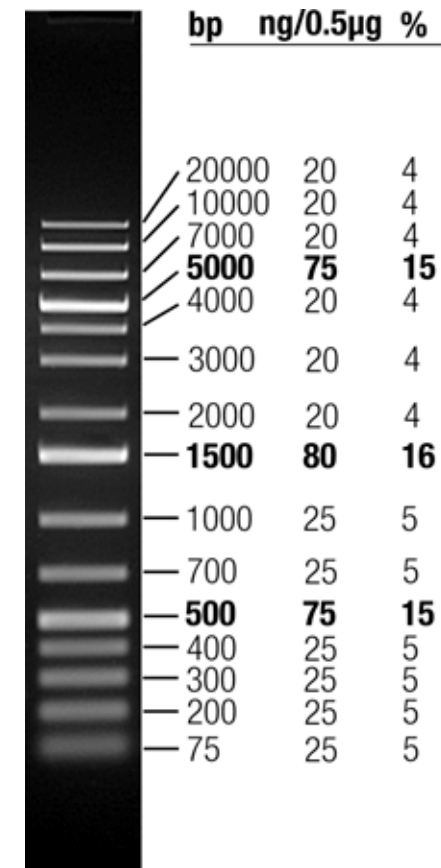
Step 2: Load on the gel

*For gels with other lane widths, the components of the mixture should be scaled either up or down. Use 0.2 μ l (0.1 μ g) of DNA Ladder per 1mm of lane.

Recommendations

- Do not heat before loading.
- Dilute your DNA sample with the 6X Loading Dye Solution (#R0611, 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[®] Green I.

GeneRuler™ 1kb DNA Ladder Plus



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

Note. Formation of diffused bands of small DNA fragments is a feature of agarose gel electrophoresis.

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 for Material Safety Data Sheet of the product.