Thermo
SCIENTIFIC

PRODUCT INFORMATION

Thermo Scientific GeneRuler 100 bp DNA Ladder, ready-to-use

#SM0243 **50 µg**
(for 100 applications)

Lot: _

Concentration: 0.1 µg/µL
Supplied with: 1 mL 6X DNA Loading Dye

Store: at room temperature or at 4°C for periods up to 6 months. For longer periods store at -20°C.

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In total 2 vials.

www.thermoscientific.com/onebio

Description

Thermo Scientific GeneRuler 100 bp DNA Ladder, ready-to-use, is designed for sizing and approximate quantification of wide range double-stranded DNA on agarose and polyacrylamide gels. The ladder is composed of ten chromatography-purified individual DNA fragments (in base pairs): 1000, 900, 800, 700, 600, **500**, 400, 300, 200, 100. It contains one reference band (500 bp) for easy orientation.
The ladder is ready to use – it is premixed with 6X DNA Loading Dye for direct loading on gel.

Storage and Loading Buffer

10 mM Tris-HCl (pH 7.6), 10 mM EDTA, 0.005% bromophenol blue, 0.005% xylene cyanol FF and 10% glycerol.

6X DNA Loading Dye

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

CERTIFICATE OF ANALYSIS

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

Rev.7

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Protocol for Loading

Step 1: Mix gently

Step 2: Load 1 µL per 1 mm gel lane

Recommendations

- Do not heat before loading.
- Dilute your DNA sample with the 6X DNA Loading Dye (#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.
- For DNA band visualization with SYBR® Green, GelRed and other intercalating dyes, do not add the dyes into the sample, use gel staining after electrophoresis or include dyes into agarose gel to avoid aberrant DNA migration.

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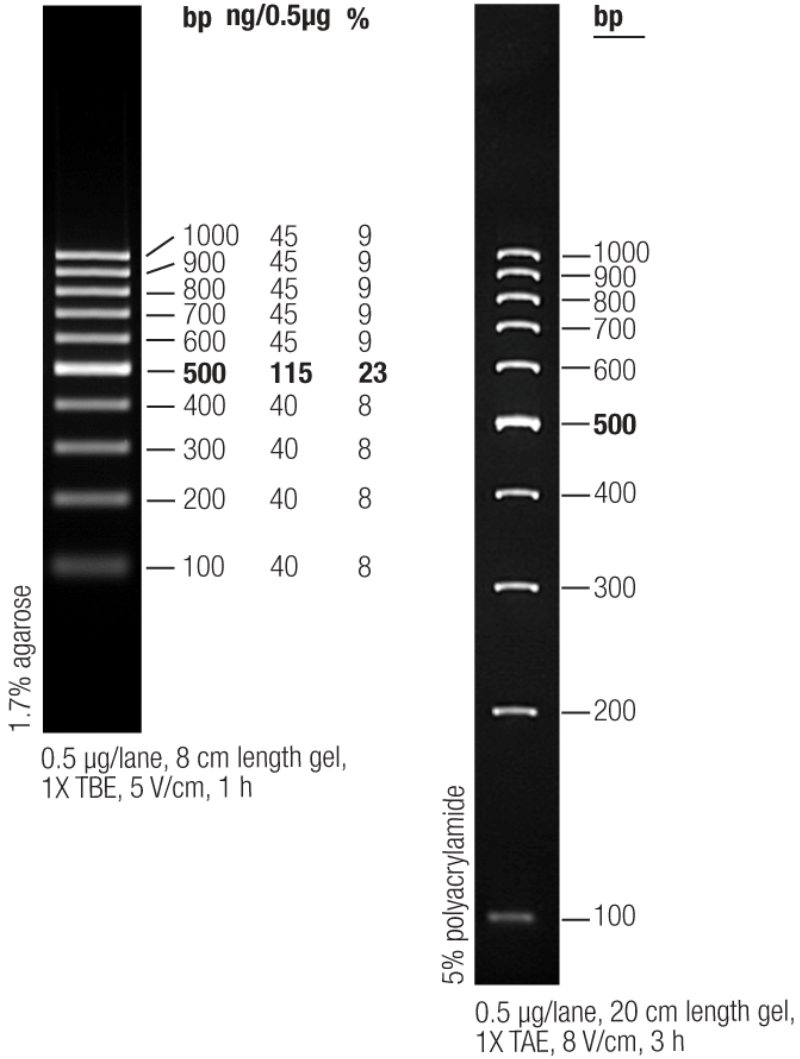

PRODUCT USE LIMITATION

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.thermoscientific.com/onebio for Material Safety Data Sheet of the product.

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