Thermo
SCIENTIFIC

PRODUCT INFORMATION

Thermo Scientific GeneRuler 1 kb Plus DNA Ladder, ready-to-use

#SM1333 **250 (5 x 50) µg**
(for 500 applications)

Lot: _

Concentration: 0.1 µg/µL
Supplied with: 2 x 1 mL 6X DNA Loading Dye

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

In total 7 vials.

www.thermoscientific.com/onebio

Description

Thermo Scientific GeneRuler 1 kb Plus DNA Ladder, ready-to-use, is designed for 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 6X DNA Loading Dye for direct loading on gels.

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

Protocol For Loading

Step 1: Mix gently

Step 2: Load 1 µL per 1 mm gel lane

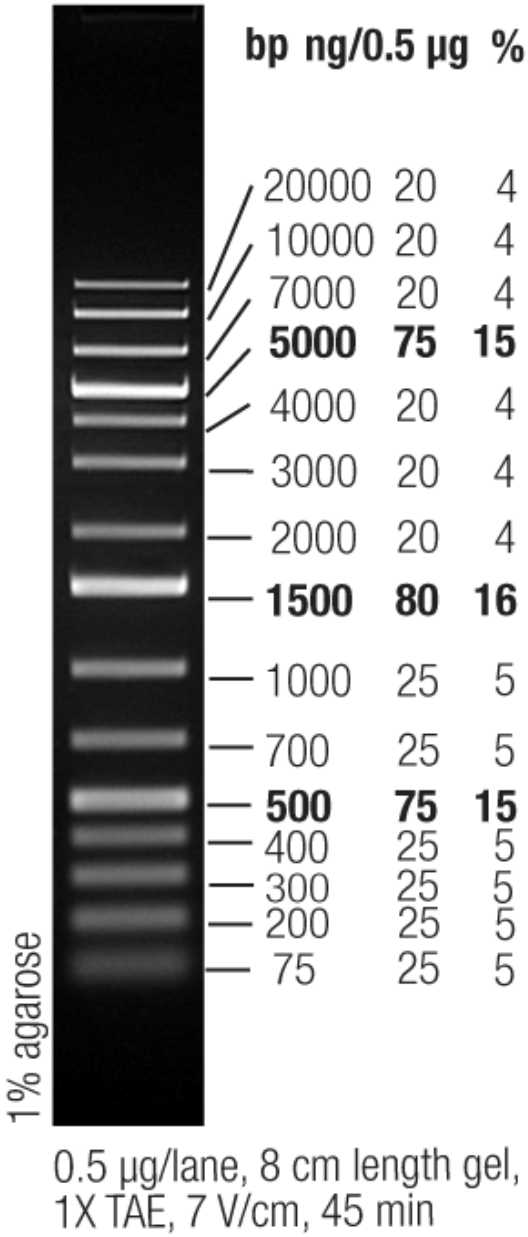
Recommendations

- 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 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.

Important Note

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.

GeneRuler 1 kb Plus DNA Ladder, ready-to-use



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