



PRODUCT INFORMATION

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

Pub. No. MAN0013033
Rev. Date 30 November 2016 (Rev. B.00)

Lot: Expiry Date:

Components	#SM1163
O'GeneRuler™ 1 kb DNA Ladder, ready-to-use, 0.1 µg/µL	250 (5 × 50) µg (for 500 applications)
6X Orange DNA Loading Dye	2 × 1 mL

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

www.thermofisher.com

For Research Use Only. Not for use in diagnostic procedures.

Description

Thermo Scientific™ O'GeneRuler™ 1 kb DNA Ladder, ready-to-use, is designed for sizing and approximate quantification of wide range double-stranded DNA fragments on agarose gel. The ladder is composed of fourteen chromatography-purified individual DNA (in base pairs): 10000, 8000, **6000**, 5000, 4000, 3500, **3000**, 2500, 2000, 1500, **1000**, 750, 500, 250. It contains three reference bands (6000, 3000 and 1000 bp) for easy orientation.

The ladder is ready to use – it is premixed with 6X Orange DNA Loading Dye for direct loading on gel.

Storage and Loading Buffer

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

6X Orange DNA Loading Dye

10 mM Tris-HCl (pH 7.6), 0.15% orange G, 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

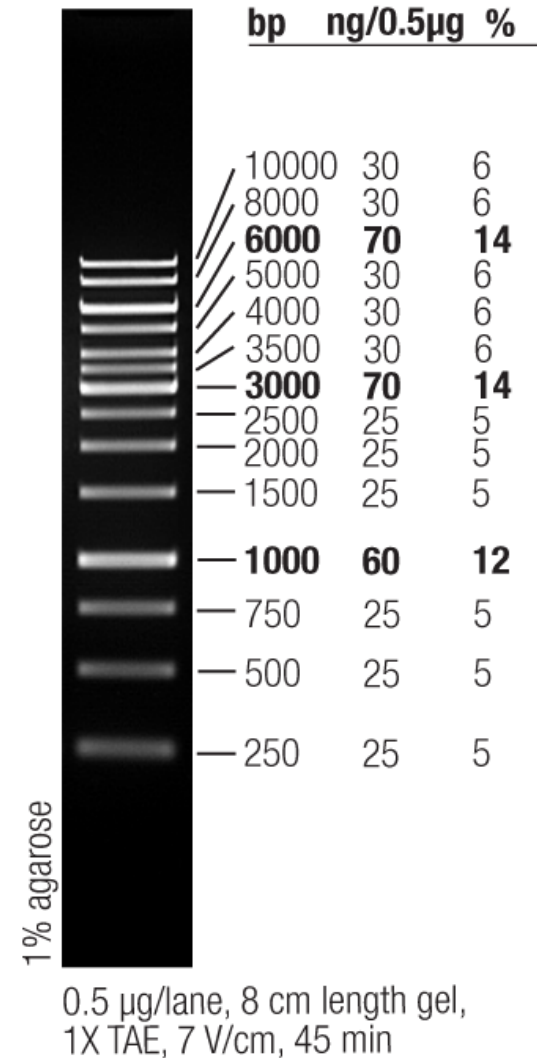
Step 1: Mix gently

Step 2: Load 1 μL per 1 mm gel lane

Recommendations

- Do not heat before loading.
- Dilute your DNA sample with the 6X Orange DNA Loading Dye (#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.
- For DNA band visualization with SYBR™ Green 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.
- **Important note:** For DNA bands visualization with GelRed™ use gel staining after electrophoresis to avoid aberrant DNA migration.

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



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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.thermofisher.com for Material Safety Data Sheet of the product.

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