

## PRODUCT INFORMATION

# Thermo Scientific GeneRuler DNA Ladder Mix, ready-to-use

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Components	#SM0333	#SM0334
GeneRuler DNA Ladder Mix, ready-to-use 0.1 µg/µL	250 (5 x 50) µg (for 500 applications)	50 µg (for 100 applications)
6X TriTrack DNA Loading Dye	2 × 1 mL	1 mL

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

## Description

Thermo Scientific™ GeneRuler™ DNA Ladder Mix, ready-to-use, is designed for sizing and approximate quantification of wide range double-stranded DNA on agarose gel. The ladder is composed of 21 chromatography-purified DNA fragments (in base pairs): 10000, 8000, 6000, 5000, 4000, 3500, **3000**, 2500, 2000, 1500, 1200, **1000**, 900, 800, 700, 600, **500**, 400, 300, 200, and 100. It contains three reference bands (3000, 1000 and 500 bp) for easy orientation.

The ladder is ready to use – it is premixed with 6X TriTrack 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, 0.025% orange G and 10% glycerol.

## 6X TriTrack DNA Loading Dye

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

## Protocol for Loading

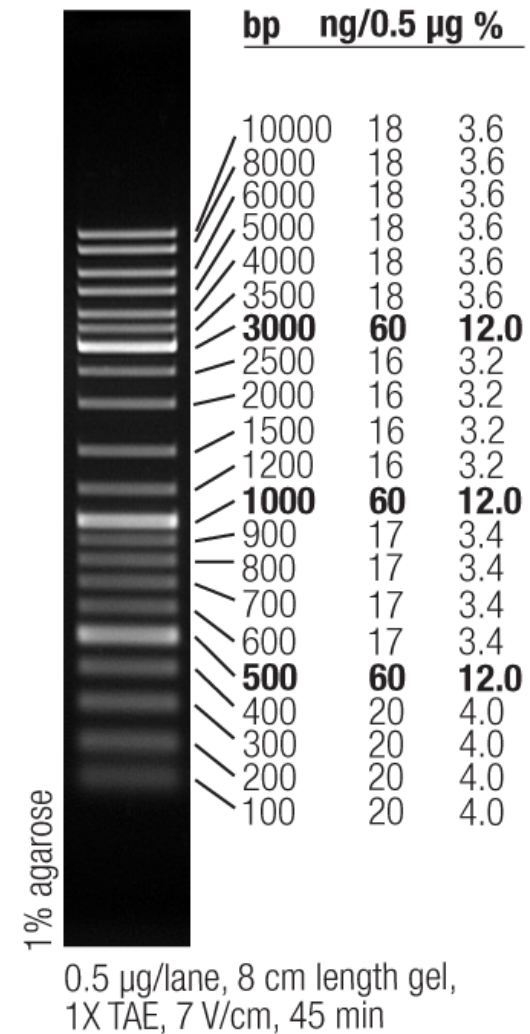
**Step 1:** Mix gently

**Step 2:** Load 1  $\mu\text{L}$  per 1 mm gel lane

### Recommendations

- Do not heat before loading.
- Dilute your DNA sample with the 6X TriTrack DNA Loading Dye (#R1161, 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.

## GeneRuler DNA Ladder Mix, ready-to-use



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