

GeneRuler Express DNA Ladder, ready-to-use

Catalog Number SM1553

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WARNING! Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from thermofisher.com/support.

Contents and storage

Cat. No.	Contents	Amount	Storage
SM1553	GeneRuler™ Express DNA Ladder, ready-to-use	50 µg (for 100 applications), 0.1 µg/µL	at room temperature or at 4 °C for periods up to 6 months. For longer periods store at -20 °C.
	6X TriTrack DNA Loading Dye	1 mL	

Description

Thermo Scientific™ GeneRuler™ Express DNA Ladder, ready-to-use, is designed for fast sizing and quantification of DNA fragments under a wide range of electrophoresis conditions in agarose gels. The band pattern is not affected by the composition of electrophoresis buffer, voltage and gel percentage. The ladder bands are easily separated in 5-10 min at high voltage.

The ladder is a mixture of nine chromatography-purified individual DNA fragments (in base pairs): 5000, 3000, 2000, **1500**, 1000, 750, **500**, 300, 100. It contains two reference bands (1500 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 gels.

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

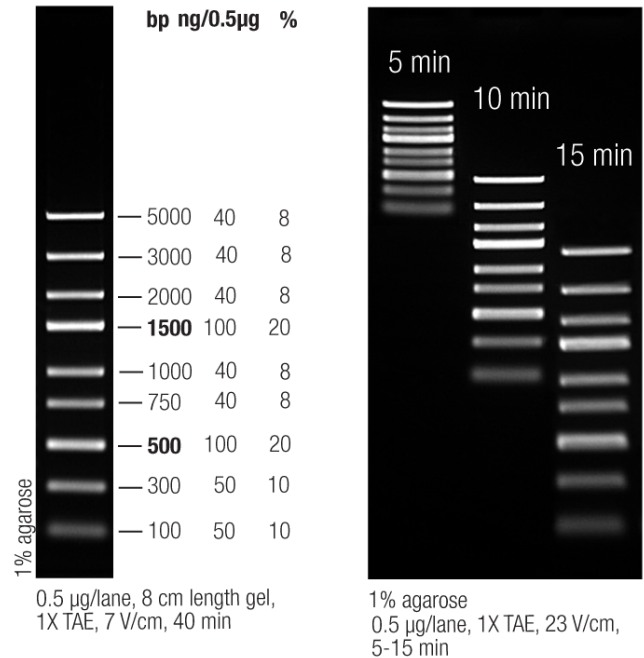
Step 1: Mix gently

Step 2: Load 1 µL 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 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.
- 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.

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Limited product warranty

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