

MassRuler High Range DNA Ladder, ready-to-use

Catalog Number SM0393

Pub. No. MAN0013020 Rev. C.00



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
SM0393	MassRuler High Range DNA Ladder, ready-to-use	2 x 500 μ L (for 50 – 200 applications), 42.2 ng/ μ L	at room temperature or at 4 °C for periods up to 6 months. For longer periods store at -20 °C.
	6X MassRuler DNA Loading Dye	1 mL	

Description

Thermo Scientific™ MassRuler™ High Range DNA Ladder is designed for fast and accurate quantification and sizing of DNA fragments on agarose gels.

The ladder contains the following 9 discrete fragments (in base pairs): 10000, 8000, 6000, 5000, 4000, 3000, 2500, 2000, 1500.

The ladder is premixed with MassRuler™ DNA Loading Dye and can be directly applied onto an agarose gel.

Storage and Loading Buffer

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

6X MassRuler DNA Loading Dye

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

Protocol for Loading

Step 1: Mix gently

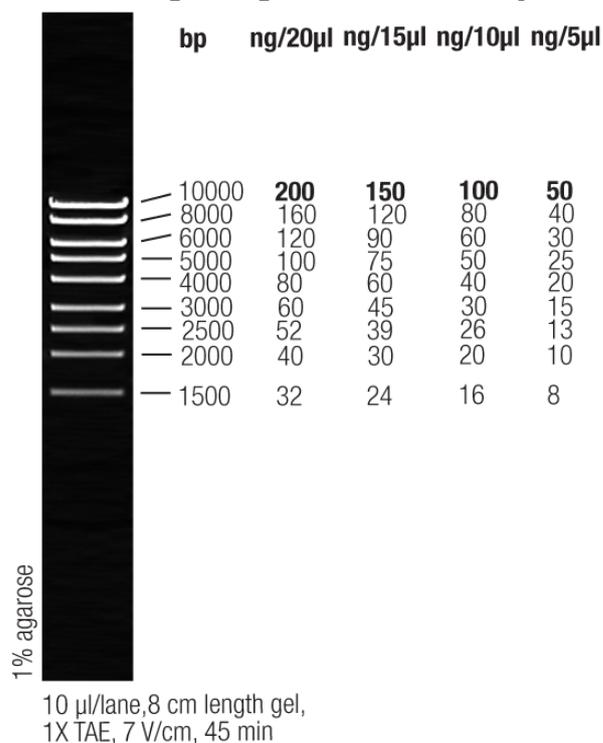
Step 2: Load 5-20 μ L per gel lane.

Recommendations

- Do not heat before loading.
- For accurate DNA quantification:
 - dilute your DNA sample with the 6X MassRuler DNA Loading Dye (#R0621, 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;
 - adjust the concentration of the sample such that the expected amount of DNA loaded is approximately equal to that of Ladder's band of a nearest size.
- 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.

Note. The apparent intensity of bands containing equal ng quantities of DNA may differ in different horizontal sections of gel (diminishes from top to bottom).

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Limited product warranty

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Thermo Fisher Scientific Baltics UAB | V.A. Graiciuno 8, LT-02241 Vilnius, Lithuania
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