



PRODUCT INFORMATION

**Thermo Scientific
MassRuler DNA Ladder Mix,
ready-to-use**

Pub. No. MAN0013021

Rev. Date 9 December 2016 (Rev. B.00)

Lot: __ Expiry Date: __

Components	#SM0403
MassRuler™ DNA Ladder Mix, ready-to-use, 103 ng/μL	2 × 500 μL (for 50-200 applications)
6X MassRuler™ DNA Loading Dye	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™ MassRuler™ DNA Ladder Mix, ready-to-use, is designed for fast and accurate quantification and sizing of DNA fragments on agarose gels. The ladder contains the following 20 discrete fragments (in base pairs): 10000, 8000, 6000, 5000, 4000, 3000, 2500, 2000, 1500, 1031, 900, 800, 700, 600, 500, 400, 300, 200, 100, 80.

The ladder is ready to use – it 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.

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 5-20 μL per gel lane.

Recommendations

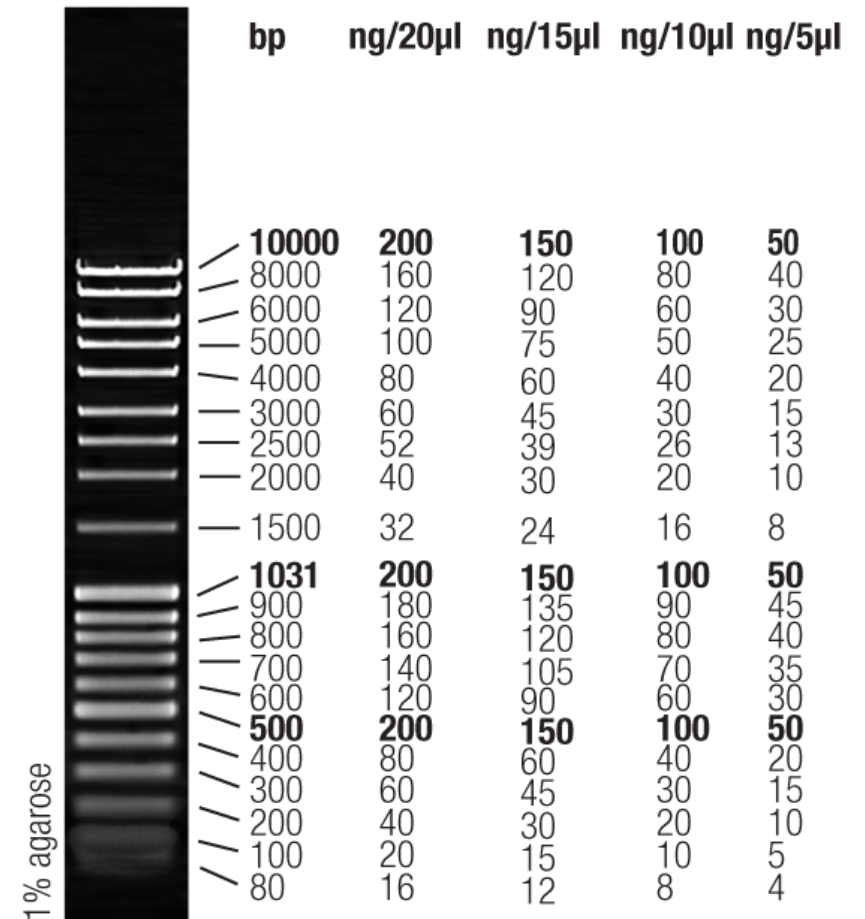
- Do not heat before loading.
- For accurate DNA quantification:
 - dilute your DNA sample with the 6X MassRuler DNA Loading Dye (#R0621, supplied with the ladder) Mix 1 volume of the dye solution with 5 volumes of the DNA sample.
 - load the same volumes of the DNA sample and the DNA ladder;
 - adjust 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).

MassRuler DNA Ladder Mix, ready-to-use



10 μl /lane, 8 cm length gel,
1X TAE, 7 V/cm, 45 min

LIMITED USE LABEL LICENSE: Internal Research and Development Use Only.

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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.