Lambda DNA/HindIII Marker, 2

Catalog Number SM0101, SM0102

Pub. No. MAN0012986 **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
SM0101	Lambda DNA/HindIII Marker, 2,	250 (5 x 50) µg (for 500 applications), 0.5 µg/µL	-25 °C to -15 °C
	6X DNA Loading Dye	2 x 1 mL	
SM0102	Lambda DNA/HindIII Marker, 2,	1250 (25 x 50) µg (for 2500 applications), 0.5 µg/µL	
	6X DNA Loading Dye	10 x 1 mL	

Description

Lambda DNA was completely digested with HindIII, purified and dissolved in a storage buffer.
The DNA marker contains the following 8 discrete fragments (in base pairs): 23130*, 9416, 6557, 4361*, 2322, 2027, 564, 125.

Storage Buffer

10 mM Tris-HCl (pH 7.6), 1 mM EDTA.

6X DNA Loading Dye

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

Protocol for Loading

Loading mixture for the 5 mm agarose gel lane*:

DNA ladder	1 µL
6X DNA Loading Dye	1 µL
Deionized water	4 µL
	6 µL

Step 1: Mix gently
Step 2: Load on the gel

*For gels with other lane widths, the components of the mixture should be scaled either up or down. Use 0.2 µL (0.1 µg) of DNA Ladder per 1 mm of lane.

Recommendations

- Heat for 5 min at 65 °C and then cool on ice for 3 min.
- Dilute your DNA sample with the 6X DNA Loading Dye (#R0611, supplied with the ladder): mix 1 volume of the dye solution with 5 volumes of the DNA sample
- 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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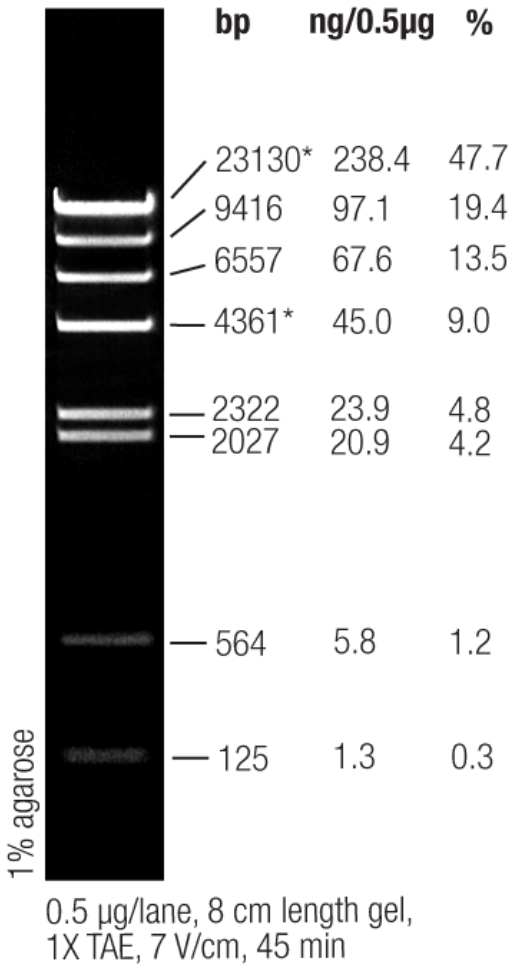

* The cohesive ends (the 12 nt *cos* site of bacteriophage lambda) of fragments 23130 bp and 4361 bp may anneal and form an additional band at 27491 bp. These fragments can be separated by heating at 65 °C for 5 min and then cooling on ice for 3 min.

Limited product warranty

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