

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](https://www.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
	<hr/>
	6 µL

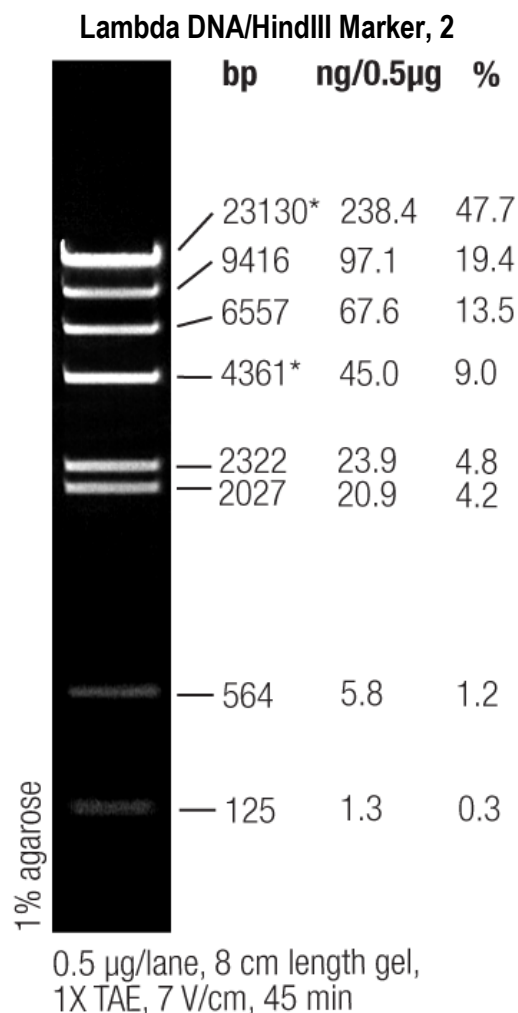
Step 1: Mix gently

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.



* 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

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale at www.thermofisher.com/us/en/home/global/terms-and-conditions.html. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.



Thermo Fisher Scientific Baltics UAB | V.A. Graiciuno 8, LT-02241 Vilnius, Lithuania
For descriptions of symbols on product labels or product documents, go to thermofisher.com/symbols-definition.

The information in this guide is subject to change without notice.

DISCLAIMER: TO THE EXTENT ALLOWED BY LAW, THERMO FISHER SCIENTIFIC INC. AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

Important Licensing Information: These products may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2019 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. GelRed is a registered trademark of Biotium Inc.

thermofisher.com/support | thermofisher.com/askaquestion

thermofisher.com

ThermoFisher
SCIENTIFIC