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# Lambda DNA/EcoRI Marker, 1

### Catalog Number SM0281

**Pub. No.** MAN0013003 **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
SM0281	Lambda DNA/EcoRl Marker, 1	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	

### **Description**

Lambda DNA was completely digested with EcoRI, purified and dissolved in storage buffer.

The DNA marker contains the following 6 discrete fragments (in base pairs): 21226\*, 7421, 5804, 5643, 4878, 3530\*.

# **Storage Buffer**

10 mM Tris-HCI (pH7.6), 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

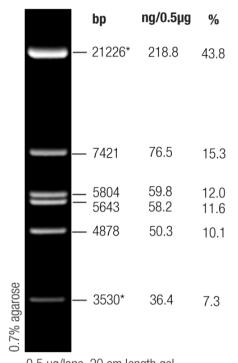
\*For gels with other lane widths, the components of the mixture should be scaled either up or down. Use 0.2 µL (0.1 µg) of DNA Ladder per 1 mm of lane.



#### Recommendations

- Heat for 5min 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, GelRed 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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0.5 µg/lane, 20 cm length gel, 1X TAE, 3 V/cm, 18 h (until bromophenol blue dye reached the bottom of the gel).

#### Limited product warranty

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<sup>\*</sup> The cohesive ends (the 12 nt cos site of bacteriophage lambda) of fragments 21226 bp and 3530 bp may anneal and form an additional band at 24756 bp. These fragments can be separated by heating at 65 °C for 5 min and then cooling on ice for 3 min.