



## PRODUCT INFORMATION

# Lambda DNA/HindIII Marker, 2

Pub. No. MAN0012986

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

Lot: \_\_      Expiry Date: \_\_

| Components                                 | #SM0101                                   | #SM0102                                      |
|--------------------------------------------|-------------------------------------------|----------------------------------------------|
| Lambda DNA/HindIII Marker, 2,<br>0.5 µg/µL | 250 (5 × 50) µg<br>(for 500 applications) | 1250 (25 × 50) µg<br>(for 2500 applications) |
| 6X DNA Loading Dye                         | 2 × 1 mL                                  | 10 × 1 mL                                    |

Store at -20°C

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For Research Use Only. Not for use in diagnostic procedures.

## 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.

## CERTIFICATE OF ANALYSIS

Well-defined bands are formed during agarose gel electrophoresis.

The DNA concentration is determined spectrophotometrically.

The absence of nucleases is confirmed by a direct nuclease activity assay.

Quality authorized by:

Jurgita Zilinskiene

## Protocol for Loading

Loading mixture for the 5 mm agarose gel lane\*:

|                    |           |
|--------------------|-----------|
| DNA ladder         | 1 $\mu$ L |
| 6X DNA Loading Dye | 1 $\mu$ L |
| Deionized water    | 4 $\mu$ L |
|                    | <hr/>     |
|                    | 6 $\mu$ L |

**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  $\mu$ L (0.1  $\mu$ g) of DNA Ladder per 1 mm of lane.

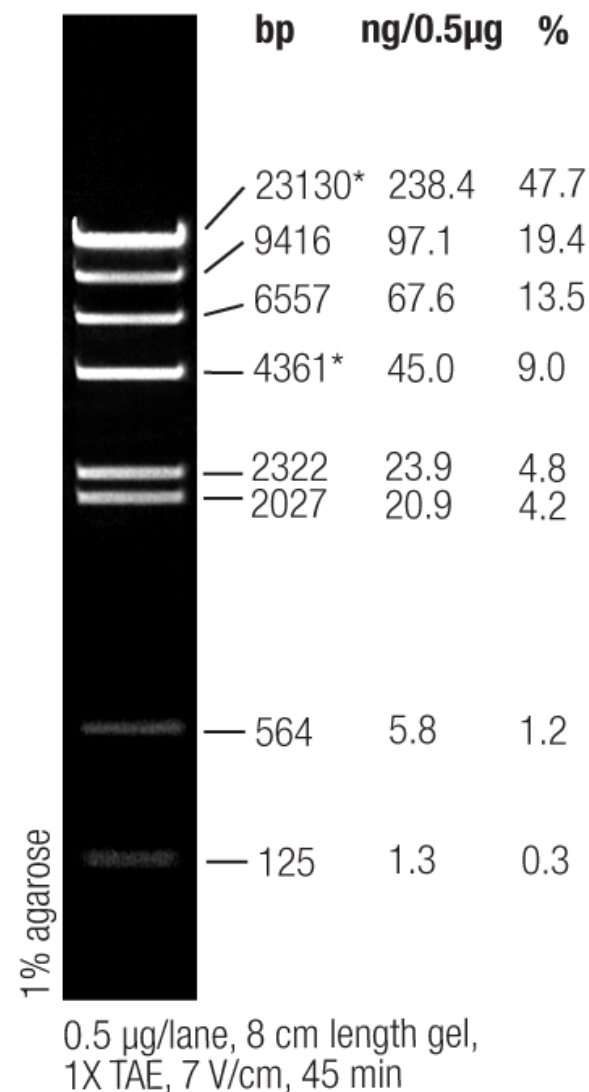
## Recommendations

- 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<sup>™</sup> 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<sup>™</sup> use gel staining after electrophoresis to avoid aberrant DNA migration.

## Lambda DNA/HindIII Marker, 2



\* 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.

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