Fermentas
LIFE SCIENCES

CERTIFICATE OF ANALYSIS

Lambda DNA/Eco47I (AvaII) Marker, 13

#SM1051 250 (5 x 50) µg

Lot: _

Concentration: 0.5 µg/µl
Supplied with: 2 x 1 ml 6X DNA Loading Dye

Store at -20°C.

In total 7 vials.

ISO 9001 ISO 14001
www.fermentas.com

Description

Lambda DNA was completely digested with Eco47I, purified and dissolved in storage buffer.
The DNA marker contains the following 36 discrete fragments (in base pairs): 8126, 6555, 6442, 3676, 2606, 2555, 2134, 2005, 1951, 1611*, 1420, 1284, 985, 974, 894, 597, 590, 513, 511, 433, 398, 345, 310, 308, 272, 242, 215, 151, 88, 73, 67, 45, 42, 32, 29*, 23.

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 60 mM EDTA.

Quality Control Assay Data

Well-defined bands are formed during agarose gel electrophoresis.
The DNA concentration is determined spectrophptometrically.
The absence of nucleases is confirmed by a direct nuclease activity assay.

Quality authorized by: Jurgita Zilinskiene

Rev III
53

RECOMMENDATIONS FOR USE

- Vortex gently just prior to use.
- Prepare the DNA marker before loading:
  1 µl (0.5 µg) of the DNA marker;
  1 µl of 6X DNA Loading Dye;
  4 µl of deionized water.
- Heat for 5 min at 65°C and then cool on ice for 3 min (*see* Note).
- Apply the prepared amount (6 µl) of the DNA marker on a 5 mm lane of agarose gel.
- Following electrophoretic separation on gel, visualize the DNA bands by ethidium bromide staining.

Note

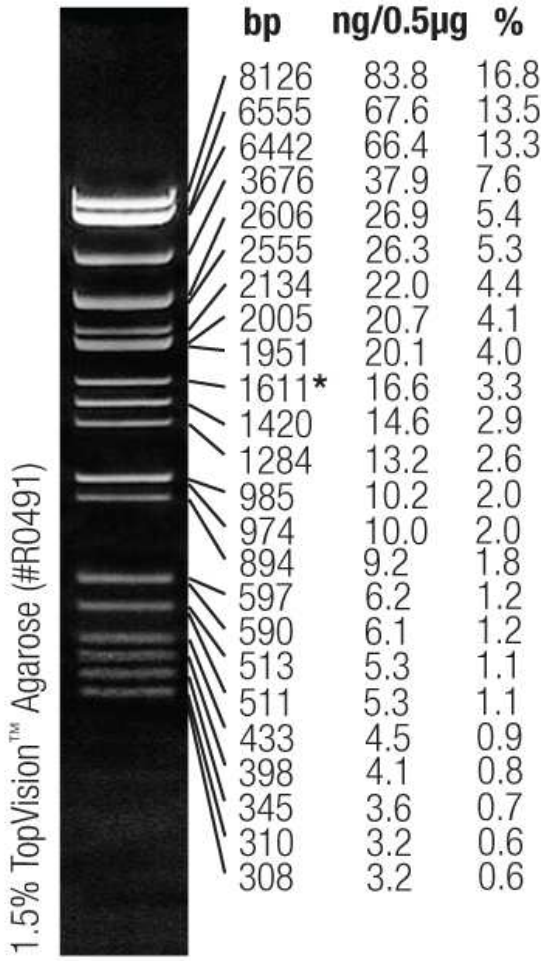
- One vial (50 µg) is sufficient for ~100 applications.
- Use 0.1 µg (0.2 µl) of the DNA marker (before dilution) per 1 mm of an agarose gel lane width.

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.fermentas.com for Material Safety Data Sheet of the product.

Lambda DNA/Eco47I (AvaII) Marker, 13



0.5 µg/lane,8 cm length gel,
1X TAE, 7 V/cm, 1 h

* The cohesive ends (the12 nt *cos* site of bacteriophage lambda) of fragments 1611 bp and 29 bp may anneal and form an additional band of 1640 bp. These fragments can be separated by heating at 65°C for 5 min and then cooling on ice for 3 min.
272, 242, 215, 151, 88, 73, 67, 45, 42, 32, 29 and 23 bp fragments are not visible and they comprise 2.7%.