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ProductInformation

LAMBDA DNA MIXED DIGEST

Product No. **D 2916** Lot 104K1391 Storage: Below 0 °C

Product Description

Storage buffer: 10 mM Tris-HCl, pH 8.0, 0.1 mM EDTA

Concentration: 500 μg/ml Ratio A₂₆₀/A₂₈₀: 1.9

Suitable for use as a molecular weight marker for

agarose gel electrophoresis.

Suitability Assay

Lambda DNA Mixed Digest was prepared for electrophoresis as follows:

1 μg Lambda Mixed Digest

6 μl Gel Loading Solution (Product No. G 2526) (0.05% w/v bromophenol blue, 40% w/v sucrose, 0.1 M EDTA, pH 8.0)

 $2 \mu I$ 10X TAE (Product No. T 9650)

11 μl Water, Molecular Biology Reagent (Product No. W 4502)

The above solution was heated to 65 °C for 5 minutes and quick cooled on ice. 0.2 μg and 0.4 μg were loaded on a 0.4% agarose (Product No. A 9539) submarine-type minigel. Agarose gel electrophoresis was performed in 1X TAE (0.04M Tris acetate, pH 8.3, 1 mM EDTA) as running buffer. The gel was run with appropriate DNA fragment size standards at 20 volts for 19 hours. After staining 10-20 minutes in 5 $\mu g/ml$ ethidium bromide, 9 of 10 bands (10,086-48,502 bp) were clearly resolved and the pattern was consistent with the indicated fragment sizes.

Comments

Ethidium bromide background can be reduced by destaining 30-45 minutes in 1X TAE buffer.

Fragment Sizes: Base Pairs (BP)

48,502
38,416
33,498
29,946
24,508
23,994
17,053
15,004
10,086
1,053

Reference

Daniels, D.L., *et al.*, Appendix II: Complete Annotated Lambda Sequence in <u>Lambda-II</u>, Cold Spring Harbor Laboratory, N.Y. (1983) eds. Hendrix, R.W., Roberts, J.W., Stahl, F.W. and Weisberg, R.A.

11/04