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ProductInformation

Lambda DNA Mixed Digest

Catalog Number **D2916** Storage Temperature –20 °C

Product Description

The mixed digest contains uncut bacteria phage Lambda plus Lambda completely digested by *Apa* I, *Kpn* I, *Xba* I, and *Xho* I in separate reactions. The fragments were filled in using DNA polymerase I Klenow fragment to prevent reannealing. Suitable for size determination of double-stranded DNA using DNA electrophoresis.

The digest is supplied in a solution of 10 mM Tris-HCl, pH 8.0, with 1 mM EDTA and contains 10 fragments, 1,503–48,502 bp (see Table 1).

Table 1.

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

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store the digest at -20 °C.

Procedure

A sample of the marker should be diluted with gel loading buffer to an appropriate loading concentration. The Loading Mixture may be prepared as follows:

- 1 μg Lambda Mixed Digest
- 6 μl Gel Loading Solution (Catalog Number G2526, 0.05% w/v bromophenol blue, 40% w/v sucrose, and 0.1 M EDTA, pH 8.0)
- 2 μl 10× TAE Buffer (Catalog Number T9650)
- 11 μl Water, Molecular Biology Reagent (Catalog Number W4502)

The Loading Mixture was heated to 65 $^{\circ}$ C for 5 minutes and quick cooled on ice. 0.5 μg was loaded on a 0.4% agarose gel. After electrophoresis, the gel was stained with ethidium bromide. The ethidium bromide background can be reduced by destaining 30–45 minutes in 1× TAE buffer.

References

 Daniels, D.L., et al., Appendix II: Complete Annotated Lambda Sequence in <u>Lambda-II</u>, Hendrix, R.W., et al., eds. Cold Spring Harbor Laboratory (Cold Spring Harbor, NY: 1983).

JB,KH,MAM 05/07-1