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ProductInformation

LAMBDA DNA Pst I DIGEST

Product Number **D1793**

Lot Number 061K9051

Store below 0 °C

Product Description
Suitable for use as a molecular weight marker for agarose or acrylamide gel electrophoresis.

Ratio A_{260}/A_{280}: 1.9

Concentration: 390 µg/ml

Storage Buffer
10 mM Tris-HCl, pH 8.0
1 mM EDTA

Suitability Assay
Lambda Pst I Digest was prepared for electrophoresis as follows: 6.3 µl or 0.3 volume of gel loading solution (Product No. G2526, 0.05% w/v bromphenol blue, 40% w/v sucrose, 0.1 M EDTA pH 8.0) was added to 21µl or 10 µg of Lambda DNA Pst I Digest and then heated to 65 °C for 5 minutes and quick cooled on ice.

0.25 µg to 0.5 µg of Lambda DNA Pst I digest per lane were loaded on a 0.7% agarose submarine-type minigel and 0.25 to 1µg per lane were loaded on a 10 -20% precast linear-gradient polyacrylamide gel respectively. Agarose gel electrophoresis was performed in 1X TBE (0.089 M Tris-borate, pH 8.3, 0.01M EDTA). Acrylamide gel electrophoresis was performed in 1X TAE (0.04M Tris acetate, pH 8.3, 1mM EDTA). Both gels were run with appropriate DNA fragment size standards at 50-80 volts until the tracking dye reached the bottom of the gel. After staining 15-20 minutes in 1µg/ml ethidium bromide, based on the results of both gels, all fragments were identified with the exception of the 15 base pair fragment.

Fragment Sizes: base pairs (bp)

11,497	singlet	468	singlet
5,077	triplet	448	singlet
4,749	triplet	339	singlet
4,507	triplet	264	singlet
2,838	singlet	247	singlet
2,560	triplet	216	doublet
2,459	triplet	211	doublet
2,443	triplet	200	singlet
2,140	singlet	164	singlet
1,986	singlet	150	singlet
1,700	singlet	94	doublet
1,159	singlet	87	doublet
1,093	singlet	72	singlet
805	singlet	15	Not identified
514	doublet		

Note: Singlet is seen as a single band composed of a single fragment. Doublet is seen as part of a heavier band composed of two fragments. Triplet is seen as part of a heavy band composed of three fragments.

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

References
1. Sanger, F., et al., J. Mol. Biol. **162**, 729 1982)

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