



Product Information

ΦX174 Hae III Digest

Product No. **D0672**

Lot No. 085K6103

Store at less than 0 °C

Product Summary

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

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

Concentration: 477 µg/ml

Storage Buffer: 10 mM Tris-HCl, pH 8.0,
1.0 mM EDTA

Suitability Assay

ΦX174 Hae III digest was prepared for electrophoresis as follows:

5 µg ΦX174 Hae III Digest

0 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)

Q.S. to 50 µl total volume.

0.25-1.0 µg were loaded on a 1.7% agarose (Product No. A 9539) submarine-type minigel. Agarose gel electrophoresis was performed in 1X TBE (0.089 M Tris-borate, pH 8.3, 0.01M EDTA). The gel was run with appropriate DNA fragment size standards at 70 volts for approximately 2 hours. After staining 15-20 minutes in 1 µg/ml ethidium bromide, 10 bands were clearly resolved and the pattern was consistent with the indicated fragment sizes.

Fragment Sizes: base pairs (bp)

| | |
|-------|-----|
| 1,353 | 271 |
| 1,078 | 234 |
| 872 | 194 |
| 603 | 118 |
| 310 | 72 |
| 281 | |

Comments

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

Better resolution of the smaller bands can be achieved using a 4% agarose gel (prepared using wide range agarose, Product No. A 2790) at 60V for 3-4 hours.

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

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