

### ΦX174 Hae III Digest

# **ProductInformation**

Product No. D0672

Lot No. 041K9013

Store at less than 0°C

## **Product Summary**

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

Ratio A<sub>260</sub>/A<sub>280</sub>: 1.8

Concentration: 742 µg/ml

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

1.0 mM EDTA

#### Suitability Assay

 $\Phi$ X174 Hae III digest was prepared for electrophoresis as follows:

5 μg ΦX174 Hae III Digest

10  $\,\mu l$  gel loading solution (Product No. G2526) (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  $\mu$ g were loaded on a 1.7% agarose (Product No. A9539) 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  $\mu$ g/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. A2790) 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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