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# **ProductInformation**

## pBR322 Hae III Digest

Product No. D 9655

Lot 093K9009

Store below 0 °C

#### PRODUCT SUMMARY

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

A<sub>260</sub>/A<sub>280</sub> Ratio: 2.0

Concentration: 579 µg/ml

#### **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 consisting of wide range/standard agarose mixture (3:1), Sigma Product No. A7431 at 60V for 3-4 hours or electrophoresis in a 10-20% acrylamide gradient gel until the tracking dye migrates to the bottom of the gel.

#### STORAGE BUFFER

10 mM Tris-HCl, pH 8.0 0.1 mM EDTA

### **SUITABILITY ASSAY**

pBR322 Hae III digest was prepared for electrophoresis as follows:

0.15-0.3 µg pBR322 Hae III Digest

2 μl gel loading solution (G 2526) (0.05% w/v bromophenol blue, 40% w/v sucrose, 0.1 M EDTA pH 8.0)

Q.S. to 7  $\mu$ l total volume with sterile distilled water or storage buffer.

## **SUITABILITY ASSAY (continued)**

0.15 to 0.3  $\mu g$  were loaded on a 10-20% acrylamide gradient gel. 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 95 volts until the tracking dye migrated to the bottom of the gel. After staining 10-15 minutes in 0.6  $\mu g/ml$  ethidium bromide, 17 bands (51-587 bp) were clearly resolved and the observed pattern was consistent with the expected fragment sizes.

Fragment Sizes: base pairs

587	123
540	104
504	89
458	80
434	64
267	57
234	51
213	21
192	18
184	11
124	8

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