

φX174 DNA- HaeIII Digest



1-800-632-7799
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N3026S 238120914091

N3026S

50 gel lanes (50 µg) Lot: 2381209

1,000 µg/ml Store at -20°C Exp: 9/14

1.5 ml Gel Loading

Dye, Blue (6X) Store at 25°C

Description: The HaeIII Digest of φX174 yields 11 fragments suitable for use as molecular weight standards for agarose gel electrophoresis (1).

Supplied in: 10 mM Tris-HCl (pH 8.0) and 1 mM EDTA.

Reagents supplied:
6X Gel Loading Dye, Blue

1X Gel Loading Dye, Blue:

2.5% Ficoll-400
11 mM EDTA
3.3 mM Tris-HCl (pH 8.0@25°C)
0.017% SDS
0.015% bromophenol blue

Source: Prepared from φX174 *am3 cs70*. The double-stranded DNA is digested to completion with HaeIII, phenol extracted and equilibrated to 10 mM Tris-HCl (pH 8.0) and 1 mM EDTA.

Usage Recommendation: The approximate mass of DNA in each of the bands in our φX174 DNA-HaeIII Digest is as follows (assuming a 1.0 µg loading):

Fragment	Base Pairs	Daltons
1	1,353	251 ng
2	1,078	200 ng
3	872	162 ng
4	603	112 ng
5	310	58 ng
6b	281	52 ng
6a	271	50 ng
7	234	43 ng
8	194	36 ng
9	118	22 ng
10	72	13 ng

Base Pairs

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



φX174 DNA-HaeIII Digest
visualized by ethidium bromide
staining. 1.7% agarose gel.

Note: For long term storage, store at -20°C. If samples need to be diluted, use TE or other buffer of minimal ionic strength. DNA may denature if diluted in dH₂O.

Suggested protocol for loading a sample:

The following protocol is recommended for a 5 mm wide lane.

- Prepare loading mixture:

Distilled water	4 µl
6X Blue Loading Dye	1 µl
DNA Ladder	1 µl
Total volume	6 µl
- Mix gently
- Load onto the agarose gel

Note: The components of the mixture should be scaled up or down, depending on the width of the agarose gel.

References:

- Fuchs, C. et al. (1978) *Gene* 4, 1-23.
- Forster, A. C. et al. (1985) *Nucl. Acids Res.* 13, 745-761.

CERTIFICATE OF ANALYSIS

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