Lambda DNA–HindIII Digest

1-800-632-7799
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www.neb.com

N3012S 172120914091

N3012S

150 gel lanes (150 µg) **Lot: 1721209**

500 µg/ml **Store at –20°C** **Exp: 9/14**

1.5 ml Gel Loading Dye, Blue (6X) **Store at 25°C**

Description: The HindIII digest of lambda DNA (*c*I857 *ind* 1 *Sam* 7) yields 8 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.

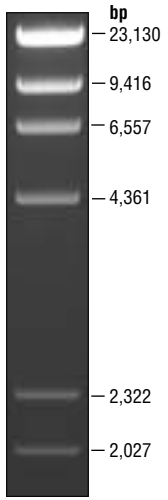
Source: The phage is isolated from the heat-inducible lysogen *E. coli* λ *c*I857 S7 and then isolated from the purified phage by phenol extraction and dialyzed.The double-stranded DNA is digested to completion with HindIII, phenol extracted and dialyzed against 10 mM Tris-HCl (pH 8.0) and 1 mM EDTA.

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

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

Fragment	Base Pairs	DNA Mass
1	23,130	477 ng
2	9,416	194 ng
3	6,557	135 ng
4	4,361	90 ng
5	2,322	48 ng
6	2,027	42 ng
7	564	12 ng
8	125	3 ng



Lambda DNA-HindIII Digest visualized by ethidium bromide staining. 1.0% 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 dH_2O and subsequently heated. Temperatures > 60°C may cause denaturation.
The cohesive ends of fragments 1 and 4 may be separated by heating to 60°C for 3 minutes.

Suggested protocol for loading a sample:
The following protocol is recommended for a 5 mm wide lane.

1. Prepare loading mixture:

Distilled water	3 µl
6X Blue Loading Dye	1 µl
DNA Ladder	2 µl
Total volume	6 µl

2. Mix gently
3. 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:

1. Daniels, D.L. et al. (1983). In R.W. Hendrix, J.W. Roberts, F.W. Stahl and R. A. Weisberg (Eds.), *Lambda-II* (pp. 519–676). New York: Cold Spring Harbor Laboratory Press.
2. Forster, A.C. et al. (1985) *Nucl. Acids Res.* 13, 745–761.

CERTIFICATE OF ANALYSIS

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