

Mass DNA Ladder



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



N3237S 001120414041

N3237S

50–200 gel lanes (1 ml) Lot: 0011204

Exp: 4/14 50 µg/ml Store at 4°C

1.5 ml Gel Loading Dye, Orange (6X)

Store at 25°C

Description: The Mass DNA ladder is a pre-mixed, ready-to-load molecular weight marker containing Orange G dye as a tracking dye.

The DNA Ladder consists of proprietary plasmids, which are digested to completion with appropriate restriction enzymes to yield 7 bands suitable for size determination and mass quantification of linear double-stranded DNA fragments. The

digested DNA includes fragments ranging from 0.5 to 10 kilobases.

Supplied in: 2.5% Ficoll-400, 11 mM EDTA, 3.3 mM Tris-HCl (pH 8.0 at 25°C), 0.017% SDS and 0.15% Orange G.

Reagents supplied:

6X Gel Loading Dye, Orange

1X Gel Loading Dye, Orange:

2.5% Ficoll-400

11 mM EDTA

3.3 mM Tris-HCl (pH 8.0@25°C)

0.017% SDS

0.015% Orange G

Preparation: The double-stranded DNA is digested to completion with appropriate restriction enzymes, phenol extracted and equilibrated in storage buffer.

Usage Recommendation: We recommend loading 5 to 20 µl (0.25 µg to 1 µg) of the Mass DNA Ladder per gel lane. For a more accurate mass estimation, always compare the samples intensity to the ladder's band of nearest size. The loading volume and the loading buffer for the samples and the Mass DNA Ladder should be the same whenever possible.

The amount of DNA in each of the bands in our Mass DNA Ladder is indicated for the different loads:

Fragment	Base Pairs	ng/5 µl	ng/10 µl	ng/15 µl	ng/20 µl
1	10,000	80	160	240	320
2	6,000	60	120	180	240
3	4,000	40	80	120	160
4	3,000	25	50	75	100
5	2,000	20	40	60	80
6	1,000	15	30	45	60
7	500	10	20	30	40

Notes: Mass DNA Ladder is stable for at least 6 months at 25°C.

For long term storage. Store at 4°C or –20°C. If stored at –20°C, mix well after thawing.

Reference:

1. Sambrook, J., Fritsch, E. F. and Maniatis, T. (1989). *Molecular Cloning: A Laboratory Manual*, (2nd ed.), (pp. 10.51–10.67). Cold Spring Harbor: Cold Spring Harbor Laboratory Press.

ng kb
240 10.0 –
180 6.0 –
120 4.0 –
75 3.0 –
60 2.0 –
45 1.0 –
30 0.5 –



Mass DNA Ladder.
Mass values are for
0.75 µg/lane.

CERTIFICATE OF ANALYSIS

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