

TriDye™ 2-Log DNA Ladder (0.1–10.0 kb)



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



N3270S

125-250 gel lanes (1.25 ml) Lot: 0081204

100 µg/ml Store at 4°C Exp: 4/14

Description: TriDye™ 2-Log DNA Ladder is a pre-mixed, ready-to-load molecular weight marker containing 3 dyes which serve as visual aids to monitor the progress of migration during agarose gel electrophoresis.

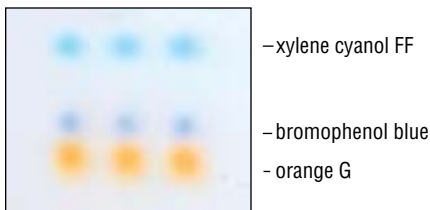
The DNA Ladder consists of proprietary plasmids which are digested to completion with appropri-

**More Lanes, Lower Price
Ready-to-load, Stable at 25°C**

ate restriction enzymes to yield 19 bands suitable for use as molecular weight standards for agarose gel electrophoresis. This digested DNA includes fragments ranging from 100 bp to 10 kb. The 0.5, 1.0 and 3.0 kb bands have increased intensity to serve as reference points.

Supplied in: 0.006% xylene cyanol FF, 0.006% bromophenol blue, 0.06% orange G, 10% glycerol, 10 mM Tris-HCl (pH 7.9) and 10 mM EDTA.

TriDye During Electrophoresis

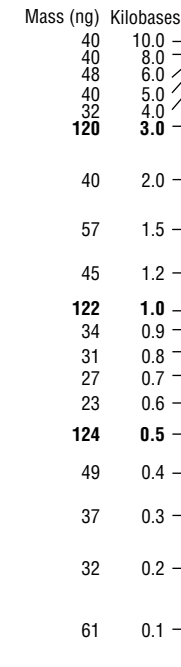


On a standard 1% agarose gel in 1X TBE, xylene cyanol FF migrates at approximately 4 kb, bromophenol blue at approximately 300 bp and the orange G at approximately 50 bp. As the percentage of agarose changes, the migration rates of the dyes relative to migration rates of the DNA will change.

TriDye Relative Migration Rates (approximate)

% agarose	xylene cyanol FF	bromophenol blue	orange G
0.5	20–40 kb	4,000 bp	150 bp
0.8	8,000 bp	400 bp	75 bp
1.0	4,000 bp	300 bp	50 bp
1.3	1,800 bp	150 bp	15 bp
1.5	1,200 bp	100 bp	10 bp
2.0	700 bp	65 bp	< 10 bp

Usage Recommendation: We recommend loading 5–10 µl (0.5–1.0 µg) of TriDye 2-Log DNA Ladder per gel lane. The TriDye 2-Log DNA Ladder was not designed for precise quantification of DNA mass but can be used for approximating the mass of DNA in comparably intense samples of similar size. The approximate mass of DNA in each of the bands in our TriDye 2-Log DNA Ladder is indicated assuming a 10 µl (1.0 µg) load:



2-Log DNA Ladder visualized by ethidium bromide staining on a 1.0% TBE agarose gel. Mass values are for 1 µg/lane.

(See other side)

CERTIFICATE OF ANALYSIS

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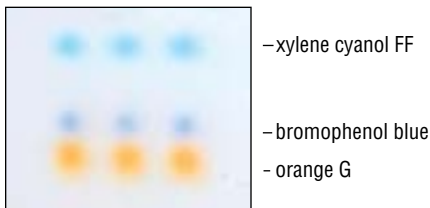
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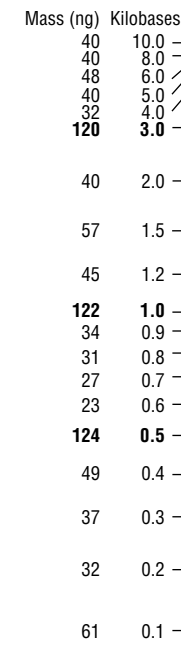


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CERTIFICATE OF ANALYSIS

Fragment	Base Pairs	DNA Mass
1	10,002	40 ng
2	8,001	40 ng
3	6,001	48 ng
4	5,001	40 ng
5	4,001	32 ng
6	3,001	120 ng
7	2,017	40 ng
8	1,517	57 ng
9	1,200	45 ng
10	1,000	122 ng
11	900	34 ng
12	800	31 ng
13	700	27 ng
14	600	23 ng
15a	517	124 ng
15b	500	
16	400	49 ng
17	300	37 ng
18	200	32 ng
19	100	61 ng

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

Notes:

TriDye 2-Log 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: 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.

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