Midrange PFG Marker I

1-800-632-7799
info@neb.com
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N3551S 034130815081

N3551S

50 gel lanes **Lot: 0341308** **Exp: 8/15**

50 µg/ml **Store at –20°C**

Description: MidRange PFG Marker I is concatemers of λ DNA isolated from the bacteriophage λ (*cI*857 *ind*1 *Sam*7) mixed with Xho I digested λ DNA embedded in 1% LMP agarose and supplied in a GelSyringe™ dispenser. Xho I produces fragments of 15.0 and 33.5 kb. These fragments anneal to and form concatemers with intact λ DNA. It is designed for use as a size marker for pulsed field gel electrophoresis (PFG). Size range: 15–300 kb.

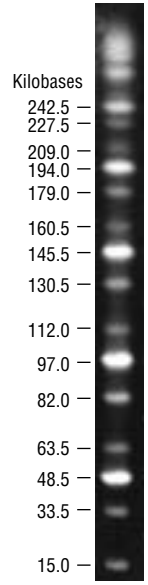
Supplied in: 1% LMP agarose, 10 mM Tris-HCl (pH 8.0), 1 mM EDTA and 50% glycerol in a GelSyringe dispenser.

Preparation: Extrude agarose from GelSyringe carefully and slice plugs from the end with a sharp blade. One plug is sufficient for one lane of a gel. Place the plug at the front of the well and seal with molten agarose. Allow no bubbles to form.

Plug Sizes: Recommended plug sizes are from 5–10 µl. A 10 µl plug (one small graduation on the GelSyringe volume scale) contains approximately 0.5 µg of DNA. Each GelSyringe yields 50+ plugs.

The photograph represents the pulsed field gel separation of Mid Range I Markers using a CHEF apparatus. The 1% agarose gel was run at 6 volts/cm using ramped pulse times from 1 to 25 seconds for 24 hours at 15°C in 0.5X TBE (50 mM Tris-HCl, 50 mM boric acid, 1 mM EDTA) made with Milli-Q™ water.

Usage Note: Place plug at the front of the well and seal with molten agarose just above gelling temperature(~42–45°C). Allow no bubbles to form.



1% agarose gel, 6 V/cm, 15°C for 24 hours. Switch times ramped from 1–25 seconds.

Never attach the agarose plugs to the gel comb before the gel is poured. Heat from the solidifying gel will cause the Lambda concatemers to denature.

Note: Melting plugs will cause denaturation of concatemers.

Fragment	Size (kb)
18	291.0
17	276.0
16	257.5
15	242.5
14	227.5
13	209.0
12	194.0
11	179.0
10	160.5
9	145.5
8	130.5
7	112.0
6	97.0
5	82.0
4	63.5
3	48.5
2	33.5
1	15.0

Reference:

1. Ellard, J., Greci, J. and Davis, T.B., unpublished observations.

CERTIFICATE OF ANALYSIS

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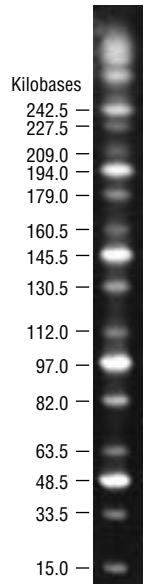

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