

Lambda Ladder PFG Marker



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N0340S 133120914091

N0340S

50 gel lanes Lot: 1331209 Exp: 9/14

50 µg/ml Store at -20°C

Description: Successively larger concatemers of lambda DNA (*c*/857 *ind* 1 *Sam*7) embedded in 1% LMP agarose and supplied in a GelSyringe™ dispenser. Designed to be used as size markers for pulsed-field gel electrophoresis (PFG). Size range: 50–1,000 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 25+ plugs.

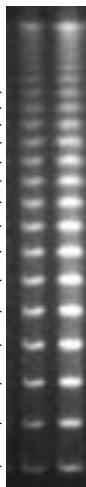
The photograph represents the pulsed field gel separation of Lambda Ladders using a CHEF apparatus. The 1% agarose gel was run at 4.5 volts/cm using ramped pulse times from 5 to 120 seconds for 48 hours at 15°C in 0.5X TBE (50 mM Tris-HCl, 50 mM boric acid, 1 mM EDTA) made with Milli-Q™ water allowing resolution of 20 Lambda Ladder bands.

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.

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.

Kilobases

727.5 —
679.0 —
630.5 —
582.0 —
533.5 —
485.0 —
436.5 —
388.0 —
339.5 —
291.0 —
242.5 —
194.0 —
145.5 —
97.0 —
48.5 —



1% agarose gel, 4.5 V/cm, 15°C
for 48 hours. Switch times ramped
from 5–120 seconds.

Note: Melting plugs will cause denaturation of concatemers.

Fragment	Size (kb)
21	1018.5
20	970.0
19	921.5
18	873.0
17	824.5
16	776.0
15	727.5
14	679.0
13	630.5
12	582.0
11	533.5
10	485.0
9	436.5
8	388.0
7	339.5
6	291.0
5	242.5
4	194.0
3	145.5
2	97.0
1	48.5

References:

1. Ellard, J., Greci, J. and Davis, T.B., unpublished observations.
2. Burke-Aguaro, D. personal communication.

CERTIFICATE OF ANALYSIS

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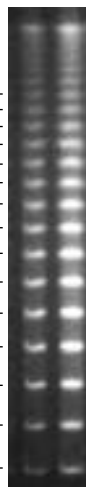
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