# Low Range PFG Marker

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

N0350S 083120514051

# N0350S

**50 gel lanes** **Lot: 0831205** **Exp: 5/14**

**25 µg/ml** **Store at –20°C**

**Description:** A mixture of lambda DNA-Hind III fragments and lambda concatemers embedded in 1% LMP agarose and supplied in a GelSringe™ dispenser. The lambda DNA monomer (48.5 kb) can be used as a reference point as its concentration has been adjusted to make it the brightest band in the pattern. Designed to be used as size markers for pulsed-field gel electrophoresis (PFG). Size range: 0.1–200 kb.

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

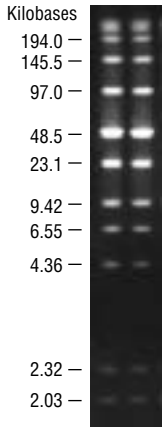
**Preparation:** Extrude agarose from GelSyringe carefully and slice plugs from the end with a sharp blade. One plug is sufficient for one lane of a gel. Place the plug at the front of the well and seal with molten agarose. Allow no bubbles to form.

**Plug Sizes:** Recommended plug size is 20 µl (two small graduations on the GelSyringe volume scale) which contains approximately 0.5 µg of DNA. Each GelSyringe yields 25+ plugs.

The photograph represents the pulsed field gel separation of Low Range Markers using a CHEF apparatus. The 1% agarose gel was run at 6 volts/cm using ramped pulse times from 1 to 12 seconds for 15 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.

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.




*1% agarose gel, 6 V/cm, 15°C for 15 hours. Switch times ramped from 1–12 seconds.*

**Note:** Melting plugs will cause denaturation of concatemers. Bands larger than 194 kb are successively larger concatemers of Lambda DNA.

| Fragment | Size (kb) |
|---|---|
| 12 | 194.0 |
| 11 | 145.5 |
| 10 | 97.0 |
| 9 | 48.5 |
| 8 | 23.1 |
| 7 | 9.42 |
| 6 | 6.55 |
| 5 | 4.36 |
| 4 | 2.32 |
| 3 | 2.03 |
| 2 | 0.56 |
| 1 | 0.13 |

**Reference:**

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 Ellard, J., Greci, J. and Davis T.B., unpublished observations.

CERTIFICATE OF ANALYSIS

Low Range PFG Marker

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

N0350S 083120514051

N0350S

50 gel lanes Lot: 0831205 Exp: 5/14

25 µg/ml Store at –20°C

Description: A mixture of lambda DNA-Hind III fragments and lambda concatemers embedded in 1% LMP agarose and supplied in a GelSringe™ dispenser. The lambda DNA monomer (48.5 kb) can be used as a reference point as its concentration has been adjusted to make it the brightest band in the pattern. Designed to be used as size markers for pulsed-field gel electrophoresis (PFG). Size range: 0.1–200 kb.

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

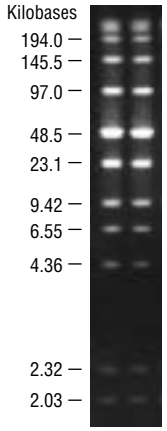
Preparation: Extrude agarose from GelSyringe carefully and slice plugs from the end with a sharp blade. One plug is sufficient for one lane of a gel. Place the plug at the front of the well and seal with molten agarose. Allow no bubbles to form.

Plug Sizes: Recommended plug size is 20 µl (two small graduations on the GelSyringe volume scale) which contains approximately 0.5 µg of DNA. Each GelSyringe yields 25+ plugs.

The photograph represents the pulsed field gel separation of Low Range Markers using a CHEF apparatus. The 1% agarose gel was run at 6 volts/cm using ramped pulse times from 1 to 12 seconds for 15 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.

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.




1% agarose gel, 6 V/cm, 15°C for 15 hours. Switch times ramped from 1–12 seconds.

Note: Melting plugs will cause denaturation of concatemers. Bands larger than 194 kb are successively larger concatemers of Lambda DNA.

| Fragment | Size (kb) |
|---|---|
| 12 | 194.0 |
| 11 | 145.5 |
| 10 | 97.0 |
| 9 | 48.5 |
| 8 | 23.1 |
| 7 | 9.42 |
| 6 | 6.55 |
| 5 | 4.36 |
| 4 | 2.32 |
| 3 | 2.03 |
| 2 | 0.56 |
| 1 | 0.13 |

Reference:

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

CERTIFICATE OF ANALYSIS