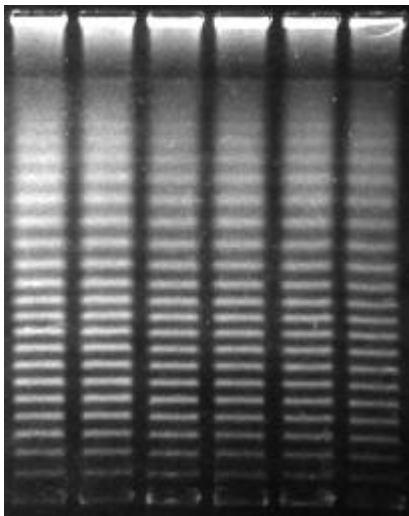




## DNA Size Standards - Lambda Ladder

### Catalog Number 170-3635

- Contents** Lambda ladder DNA imbedded in 1% Bio-Rad's Low Melt Preparative Grade Agarose. The lambda ladder consists of successively larger concatemers of  $\lambda$  c1857 Sam7. These DNA size standards may be used as size markers for CHEF, FIGE, and other pulsed field electrophoresis gels (Figure 1).
- Quantity** Five agarose inserts (25–40 lanes). The  $\lambda$  DNA concentration is approximately 15  $\mu$ g per insert.
- Size** The size of the lambda ladders starts at 48.5 kb and increases 48.5 kb with each successively larger band to approximately 1,000 kb.
- Storage** **Store at 4 °C upon receipt.** Stable for 6 months at 4 °C. Use sterile instruments when removing samples from the tube. Introduction of nucleases will shorten the shelf life. The storage buffer is 10 mM Tris, pH 9.0, and 100 mM EDTA.
- Use** Remove a sample insert from the packaging tube and place it on a smooth clean surface. Cut it to fit the sample wells using a razor blade or spatula. Each sample insert can be cut into 5-8 pieces that fit a 10 mm well. Place the cut piece of agarose into the sample well using a spatula, and gently press it to the bottom of the well. For best results, do not let the block exceed 80% of the height of the well. Fill each sample well with 0.8% Low Melt Preparative Grade Agarose to keep the sample in place and to remove air spaces. Allow the agarose to harden.



**Fig. 1. Lambda ladders (concatemers of  $\lambda$  cl857 Sam7).** Electrophoresis was performed on the CHEF-DR<sup>®</sup> II pulsed field electrophoresis system at 200 V (6 V/cm) at 14 °C. Switch time was ramped from 50 seconds to 90 seconds for 24 hours. The gel was 1% Pulsed Field Certified Agarose (Catalog 162-0137) in 0.5x TBE.