



CHEF DNA Size Markers - *H. wingei* Chromosomes

Catalog 170-3667

- Contents** *Hansenula wingei* chromosomal DNA¹ in 0.75% Bio-Rad's Low Melt Preparative Grade Agarose. *H. wingei* genomic DNA consists of 7 chromosomes, which may be used as size markers for CHEF, FIGE, and other pulsed field electrophoresis gels (Figure 1).
- Quantity** Five agarose inserts (25-40 lanes).
- Size** The sizes of the 7 *H. wingei* chromosomes have been approximated relative to lambda ladders (170-3635), *Saccharomyces cerevisiae* chromosomes (170-3605), and *Schizosaccharomyces pombe* chromosomes (170-3633) by CHEF. Approximate DNA size: 1.05, 1.37, 1.66, 1.81, 2.35, 2.70, and 3.13 mbp (megabase pairs).
- 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, pH 9.0.
- Use** CHEF DNA size markers are used to estimate the molecular weights of DNA samples separated on agarose gels. 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 to 5-8 pieces that fit a 10 mm well. Place the cut pieces 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.
- Reference** 1. Jones, C. P., Janson, M. and Nordenskjold, M., *Technique*, **1**, 90-95 (1989).

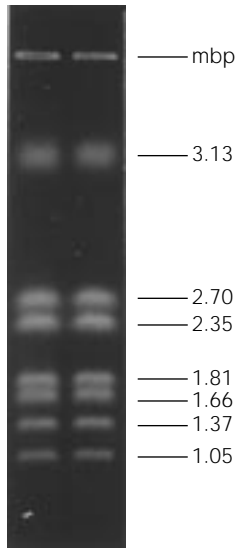


Fig. 1. *H. wingei* chromosomes, strain YB-4662-VIA. DNA was separated on a 0.8% Molecular Biology Certified Agarose (162-0133) gel in 1.0x TAE chilled to 14 °C for 48 hours on a CHEF Mapper™ XA pulsed-field electrophoresis system. The switch time was 500 seconds at 3V/cm (100V) with an included angle of 106°.