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Product Information

Pulse Marker™ 225 - 2200 kb

Catalog Number **D4658**

Store at 2-8 °C **(Do not freeze)**

Product Description
Pulse Marker 225-2200 kb consists of chromosomes isolated from *Saccharomyces cerevisiae*, strain YPH80, embedded in 1% low melting point agarose and is supplied in a convenient graduated syringe. Suitable for use as a marker for pulsed field gel electrophoresis.

Recommended Plug Size: 20 µL or two small graduations on the syringe.

Concentration: ~1 µg/20 µL plug

Quantity = 25 plugs/syringe

Note corrections made with respect to chromosome sizes (Table 1). Size estimates for *Saccharomyces cerevisiae* chromosomes based on electrophoretic mobility are subject to interpretation. These marker sizes are determined by chromosomal mapping and comparison with other markers of known size. As additional information becomes available, values for the sizes of the chromsomes may be altered slightly.

Reagent
Solution in 0.25 M EDTA, pH 9.0, 50% glycerol

Instruction For Use:
Position syringe cap facing up and remove the cap. Remove storage buffer using plunger and extrude the agarose from the syringe. Slice plugs from the end with a clean sharp blade. Retract the agarose into the syringe and replace the cap. Each plug is sufficient for one lane. Place the plug against the side of the well facing in the direction of electrophoretic migration.

CHEF Gel Analysis:
A 1% agarose gel prepared in 0.5 X TBE was subjected to pre-electrophoresis using running conditions 1 hour. Samples were added and run in 0.5 X TBE at 11-12 °C for 45 hours at 150 V. Pulse times were ramped from 70 to 145 seconds. Upon staining in 0.5 µg/ml ethidium bromide and analysis with UV (301nm) transillumination, 14 bands were resolved (two largest bands were not resolved) as in Table 1.

TABLE 1

Band	Chromosome	Size (kb)	Band	Chromosome	Size (kb)
1	XII	2200	8	X	745
2	IV	1640	9	XI	680
3	VII	1120	10	V	610
3	XV	1100	11	VIII	555
4	XVI	945	12	X	450
5	XIII	915	13	III	375
6	II	815	14	VI	295
7	XIV	785	15	I	225

References
1. Mortimer, R. and Schild, D. *Microbiol. Rev*. **49**:, 181 (1985).
2. Carle, G. and Olson, M. Proc*. Natl. Acad. Sci. USA* **82**:, 3756 (1985).

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