

## Biozym Plaque *GeneticPure* Agarose

### Introduction

Biozym Plaque *GeneticPure* is a low melting / gelling agarose which have been derived by organic synthesis which generates methoxylate groups from the basic agarose structure. It has been designed for the separation of DNA fragments between 100 bp to 23,000 bp. The *GeneticPure* quality ensures that In-Gel applications can be performed in remelted agarose, avoiding difficult DNA extraction steps. Biozym Plaque *GeneticPure* is ideally suited for digestion by agarose enzymes which makes it convenient for the recovery of large DNA fragments suitable for cloning or enzymatic processing. Biozym Plaque *GeneticPure* Agarose has no detectable DNase or RNase activity.

### Specifications

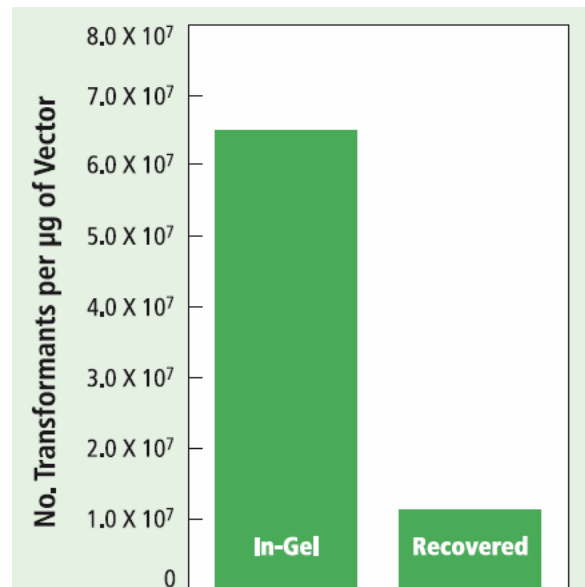
Moisture:	≤ 10%
Electroendosmosis:	≤ 0.1
Sulfate:	≤ 0.1%
Gel Strength 1%:	≥ 200 g/cm <sup>2</sup>
Gelling Temperature 1.5%:	26 - 30°C
Melting Temperature 1.5%:	≤ 65°C
DNase/ RNase activity:	None detected
DNA binding:	None detected

### Applications

- Electrophoresis of DNA fragments ≥1,000 bp
- Preparative electrophoresis
- In-Gel processing (digestion, ligation, PCR)
- Analysis & recovery of large DNA fragments

### Recommended Agarose Concentrations

Size Range (base pairs)	Final Agarose Concentration %	
	1 x TAE Buffer	1 x TBE Buffer
500 – 25,000	0.75	0.70
300 – 20,000	1.00	0.85
250 – 12,000	1.25	1.00
150 – 6,000	1.50	1.25
100 – 3,000	1.75	1.50
50 – 2,000	2.00	1.75



### Hoch effiziente In-Gel Klonierung mit Biozym Plaque GP

Zwei Bahnen *BstE II* verdauete Lambda DNA wurden elektrophoretisch in 1%iger Biozym Plaque GP (1 x TAE Puffer) aufgetrennt. Die 2,3 kb Bande wurde jeweils ausgeschnitten. Eine Probe wurde direkt in Gegenwart der aufgeschmolzenen Agarose in pUC19 ligiert (In-Gel) und die andere Probe wurde vorher mit einem speziellen Rückgewinnungsprotokoll (chaotrope-based) aufgereinigt (Recovered). Transformation in DH5α<sup>TM</sup> mittels Standardprotokoll.

### Precautions

Please refer to Material Safety Data Sheet for safety and handling information. Always wear eye protection when dissolving agarose and guard yourself and others against scalding solutions.

### Microwave Instructions for Agarose Preparation

- Choose a beaker that can hold 2-4 times the volume of the desired solution.
- Add room temperature 1X or 0.5X electrophoresis buffer and a stir bar to the beaker.
- Slowly sprinkle in the agarose powder into the liquid while rapidly stirring to prevent clumping.
- Remove the stir bar if not Teflon<sup>®</sup> coated.

- Weigh the beaker and solution before heating.
  - Cover the beaker with plastic wrap and pierce a small hole in the wrap for ventilation.
  - Heat the beaker in the microwave oven on high power until bubbles appear.
  - Remove the beaker from the microwave oven. Caution: Any microwaved solution may become superheated and foam over when agitated.
  - GENTLY swirl the beaker to resuspend any settled powder and gel pieces and reheat the beaker on high power until the solution comes to a boil. Hold at boiling point for until all of the particles are dissolved (approx. 1 minute).
  - Remove the beaker from the microwave oven. and GENTLY swirl the beaker to thoroughly mix the agarose solution.
  - After dissolution, add sufficient hot distilled water to obtain the initial weight and mix thoroughly.
  - Cool the solution to 50°C-60°C prior to casting.
- Maintain gentle boiling until all the agarose is dissolved (approximately 10 minutes).
  - Add sufficient hot distilled water to obtain the initial weight.
  - Mix thoroughly and cool the solution to 50°C-60°C prior to casting.

#### Ordering Information

Catalog No.	Size
850111	25 g
850110	125 g
850114	500 g

#### Contact

For more information about this or other Biozym products, please contact us at:

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or visit our website at

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#### For Research or Manufacturing Use Only: Not for use in In-Vitro Diagnostic Procedures

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#### Hot Plate Instructions for Agarose

##### Preparation

- Choose a beaker that can hold 2-4 times the volume of the desired solution.
- Add room temperature 1X or 0.5X electrophoresis buffer and a stir bar to the beaker.
- Slowly sprinkle in the agarose powder into the liquid while rapidly stirring to prevent clumping. Weigh the beaker and solution before heating.
- Cover the beaker with plastic wrap and pierce a small hole in the wrap for ventilation.
- Bring the solution to a boil while stirring.