

## Biozym Phor Agarose

### Introduction

Biozym Phor agarose is a unique high quality agarose for molecular screening with a separation range between 20 and 800 bp. Biozym Phor agarose gels approximate the resolution of polyacrylamide gels. Biozym Phor is an intermediate melting temperature agarose that provides twice the resolution capabilities of the finest sieving agarose products. With Biozym Phor you may resolve DNA fragments and PCR products differing in size just 2% by submarine gel electrophoresis. Using fast running protocols DNA differing in size by 1% can be resolved in as little as 1.5 hours in a 20 cm long horizontal or vertical gel format.

**For best results, Biozym Phor gels should be chilled at 4 – 8°C for 30 minutes before use. Please use also chilled buffer, when preparing Biozym Phor gels - see instructions on following page!**

Biozym Phor agarose has no detectable DNase or RNase activity.

### Specifications

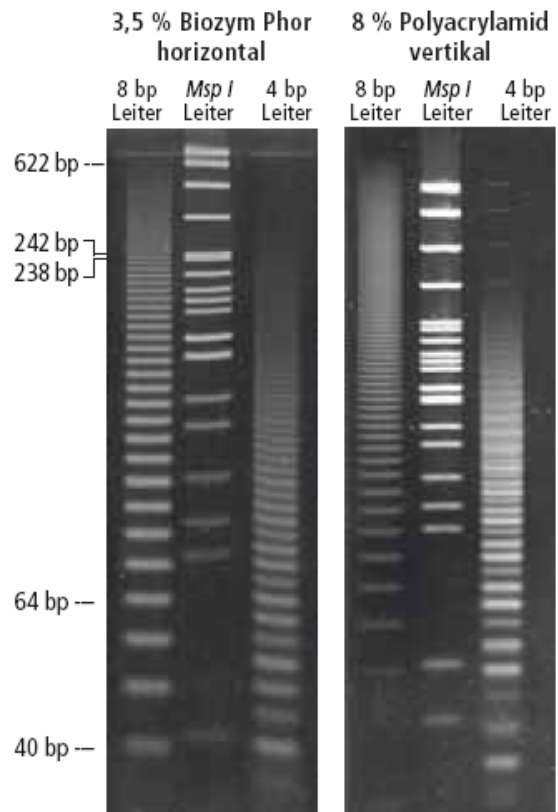
Moisture:	≤ 10%
Electroendosmosis:	≤ 0.05
Gel Strength 3%:	≥ 300 g/cm <sup>2</sup>
Gelling Temperature 3%:	≤ 35°C
Melting Temperature 3%:	≤ 75°C
DNase/ RNase activity:	None detected

### Applications

- High resolution separation of 20 bp – 800 bp DNA fragments
- Recovery of fragments under 800 bp
- Fine analysis of PCR products
- AMPFLP, STR and tri-and tetranucleotide repeat analysis

### 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.



**Auftrennung einer 4 bp- und einer 8 bp-Leiter**  
Hochauflösende Trennung einer 4 bp-Leiter, einer 8 bp-Leiter (je 0,8 µg) und eines *Msp I* Verdaus mit Biozym Phor Agarose, bzw. Polyacrylamid.

Laufbedingungen:

Horizontales Biozym Phor Gel: 15 x 20 cm, Höhe 3 mm, 4 Stunden bei 6,7 V/cm, 15 °C.

Vertikales Polyacrylamid Gel: 8 x 10 cm, Dicke 1 mm, 2 Stunden bei 8 V/cm.

### Recommended Agarose Concentrations

Size Range (base pairs)	Final Agarose Concentration %	
	1 x TAE Buffer	1 x TBE Buffer
150 – 800	2.0	1.8
100 – 600	3.0	2.0
50 - 250	4.0	3.0
20 - 130	5.0	4.0
≤ 80	-	5.0

### Microwave Instructions for Agarose Preparation

- Choose a beaker that can hold 2-4 times the volume of the desired solution.
- Add **chilled** 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.
  - Soak the agarose in the buffer for 15 minutes and 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 **medium** power for 2 minutes. You may also heat the beaker just for 1 minute, allow the solution to stand 15 minutes and finally heat on medium power for 2 minutes.
  - 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. Allow the molten agarose to cool at room temperature.
  - Store at 4 – 8°C for 30 minutes before use for optimal handling and resolution
- Cover the beaker with plastic wrap and pierce a small hole in the wrap for ventilation.
  - Bring the solution to a boil while stirring.
  - 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. Allow the molten agarose to cool at room temperature.
  - Store at 4 – 8°C for 30 minutes before use for optimal handling and resolution

#### Ordering Information

Catalog No.	Size
850181	25 g
850180	125 g
850184	500 g
850185	1000 g

#### Contact

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

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or visit our website at  
[www.biozym.com](http://www.biozym.com)

#### 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 **chilled** 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.