Biozym Sieve *GeneticPure* Agarose

Introduction

Biozym Sieve *GeneticPure* is a unique low melting temperature agarose for resolving DNA fragments from 10 bp to 1,000 bp, especially PCR products. Due to its low gelling/melting temperatures Biozym Sieve *GeneticPure* is compatible with In-gel applications (enzymatic processing of nucleic acids directly in remelted agarose) thus, it is not necessary to recover DNA from agarose gels.

The low viscosity makes it possible for gels of high concentrations, even 6%, to be prepared easily. At lower concentration (<2%) gels are fragile and difficult to handle, so special care must be taken when working. The best concentration range for easy handling is 3-6%.

Biozym Sieve *GeneticPure* is designed for reliable ligation and transformation of DNA directly in remelted agarose. Cloning procedures can be performed directly in remelted agarose, without any DNA extraction steps.

Use chilled buffer for preparation – see instructions on following page!

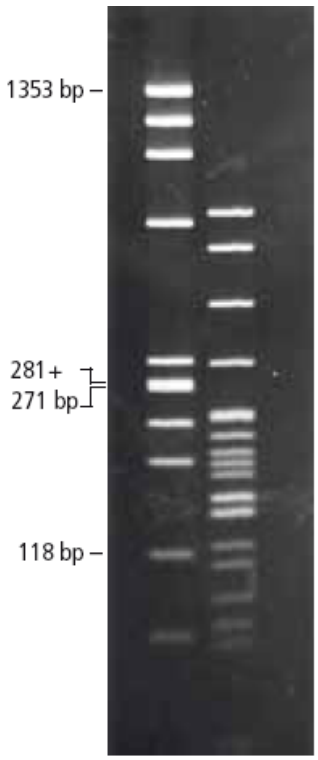
Biozym Sieve *GeneticPure* agarose has no detectable DNase or RNase activity.

Specifications

Moisture:	≤ 10%
Electroendosmosis:	≤ 0.15
Sulphate:	≤ 0.15%
Gel Strength 4%:	≥ 500 g/cm^2
Gelling Temperature 4%:	≤ 35°C
Melting Temperature 4%:	≤ 65°C
DNase/ RNase activity:	None detected
DNA binding:	None detected

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.



Trennverhalten kleiner DNA Fragmente im Biozym Sieve GP Agarose Gel

Auftrennung von DNA Fragmenten mit 2 % Biozym Sieve GP Agarose in 1 x TBE Puffer.

Bahn 1: *Hae* III Verdau von ØX174DNA (0,5 µg/Bahn)
Bahn 2: *Msp* I Verdau von pBR322 DNA (0,5 µg/Bahn)

Laufbedingungen: 1X TBE Puffer bei 5 V/cm

Recommended Agarose Concentrations

Size Range (base pairs)	Final Agarose Concentration %	
	1 x TAE Buffer	1 x TBE Buffer
500 – 1,000	2.5	2.0
150 – 700	3.0	2.5
100 – 450	3.5	3.0
70 – 300	4.0	3.5
10 – 100	4.5	4.0
8 - 50	5.0	4.5

Applications

- Analytical and preparative gel electrophoresis of small DNA fragments
- In-Gel applications

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® 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 and thoroughly mix the agarose solution.
- After dissolution, add sufficient hot distilled water to obtain the initial weight and mix thoroughly.
- Cool the solution to 50ºC-60ºC prior to casting.

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.
- 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.

Ordering Information

Catalog No.	Size
850081	25 g
850080	125 g
850084	500 g

Contact

For more information about this or other Biozym products, please contact us at:
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For Research Use.
Not for use in *In-Vitro* Diagnostic Procedures.

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