

Product Information

Agarose

Catalog Number: A2015

Product Size: 100 g

Storage: Store at room temperature for 2 years.

Description

Agarose excluding DNase RNase and Protease is often used for size-based separation of nucleic acids in agarose gel electrophoresis applications. TAE or TBE is often used as the electrophoresis buffer. Refer to the table below for the concentration of agarose gel and the resolution of DNA electrophoresis and the ideal electrophoresis buffer. For low resolution requirements, both TAE and TBE buffer can be used. For higher resolution requirements, lower concentration gels are beneficial to large molecular weight nucleic acids and TAE should be used. While higher concentration of gel is beneficial to improve the resolution of small molecular weight nucleic acids and TBE should be used.

% Agarose (w/v)	Fragment Size	Buffer
0.8%	800-22,000 bp	TAE
1.0%	500-10,000 bp	TAE/TBE
1.2%	400-7,000 bp	TAE/TBE
1.5%	250-5,000 bp	TAE/TBE
2.0%	150-3,000 bp	TBE

Protocol

1. Prepare an appropriate volume of buffer and determine the buffer concentration.
2. According to the amount of gel and concentration, add a certain amount of agarose to the conical flask with a certain amount of electrophoresis buffer (the total liquid volume should not exceed 50% of the volume of the conical flask).

3. Cover the mouth of the flask with plastic wrap, and pierce the wrap with a small hole for ventilation.

4. Place the flask in the microwave oven and heat the solution until bubbles appear.

5. Add a certain volume of nucleic acid dyes, such as gelred, gelgreen or EB, etc., and mix well.

Note: The safe and non-toxic nucleic acid dyes gelred and gelblue (UE) are recommended.

6. Pour the agarose solution into the mold and insert the comb. Gel thickness is generally between 3 and 5 mm.

7. Allow the gel to solidify at room temperature (approximately 30 min-1 h), and then place it in the electrophoresis tank for electrophoresis.

Note: When the gel is not used immediately, please wrap the gel with plastic wrap and store it at 4 °C. Generally, it can be stored for 2 to 5 days.

Specifications

Gel strength (1%): > 1200 g / cm²;

EEO: <0.15;

Sulfate: ≤ 0.15%;

Gelling temperature (1.5% gel): 35 ~ 37 °C;

Melting temperature (1.5% gel): 87 ~ 89 °C;

Moisture: ≤ 10%;

DNase/RNase activity: None detected.

For Research Use Only

