ACE Biolabs
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Datasheet

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Agarose LE

Cat# C3016 – 100 g / C3017 – 500g

Storage at Room Temp.

INTRODUCTION

Agarose is a polysaccharide and is most commonly used technique for gel electrophoresis in biochemistry and molecular biology to separate molecules such as DNA, RNA and protein.

The buffer chose to separate DNA in horizontal agarose gels is either Tris-acetate or Tris-borate buffer. RNA molecules are separated in denaturing agarose gels containing formaldehyde and performed in MOPS buffer. The efficient separation of DNA fragments of a wide size range is possible by adjusting the agarose concentration accordingly. The resolution ranges can be obtained with various concentrations of Agarose LE are shown in the table as below. Suggested gel working concentration: 0.8-1.5%

Suggested Gel concentration	Length of target sequences (bp)
0.5%	1,000～30,000
0.7%	800～12,000
1.0%	500～10,000
1.2%	400～7,000
1.5%	200～3,000
2.0%	50～2,000

PROTOCOL

1. Choose a flask that is 3-5 times the volume of the solution, add buffer solution, sprinkle in agarose and swirl gently.
2. Cover the flask with plastic wrap, and pierce a small hole in the wrap for ventilation.
3. Heat the flask on high power until the solution comes to a boil. Hold at boiling point for 1-2 Minutes until all of the particles are dissolved.
4. Remove the flask from the microwave oven. When the solution temperature fall to about 60℃(70°C for concentrations 2% or above), add Ethidium Bromide (EtBr) Solution to the gel solution if needed and mix thoroughly and pour immediately.

Note:

a. Ethidium Bromide (EtBr) Solution is carcinogenic, please wear gloves when touching it.

b. The most common stain for detecting nucleic acids in agarose gels is Ethidium Bromide (EtBr). It can be used in a concentration range between 0.5 and 1μg/mL.

c. If use the Gelview to detect nucleic acids, it is suggested to use a quarter to one-tenth of the recommended concentration (0.1μL / mL) range between 0.025 and 0.01μL/ mL.

d. For high concentration gel, please stain the gel after the electrophoresis.

5. Allow the gel to set for 30 min – 1 hour before using. Make sure to use the same electrophoresis buffer in the gel as for the running buffer.
6. The gel can be covered with plastic wrap and stored in 4°C for 2-5 days.

PRODUCT USE LIMITATION

These products are intended for research use only.