

How to prepare an agarose gel by microwave oven

1. Choose a flask that is 3-5 times the volume of the solution, add buffer solution, sprinkle in agarose and swirl gently.
2. Weight the flask and solution before heating, cover the flask with plastic wrap, and pierce a small hole in the wrap for ventilation.
3. Heat the flask in the microwave oven on medium power for 1.5-2 minutes.
4. Remove the flask from the microwave oven. Gently swirl the flask to re-suspend any settled powder and gel pieces.
5. Reheat the flask on high power until the solution comes to a boil. Hold at boiling point for 2-2.5 Minutes until all of the particles are dissolved.
6. Remove the flask from the microwave oven, add sufficient hot distilled water to obtain the initial weight, and mix thoroughly.

Warning : Electrophoresis using gels not properly prepared (i.e., not fully dissolved) is likely to result in poor quality of resolution and undesirable picture images.

以微波爐溶解 agarose 膠之方法

1. 使用液量 3-5 倍容量之燒杯，加入 Agarose 粉末與適量之 buffer 液，攪拌至完全分散為止。
2. 稱重後以保鮮膜封蓋，在膜上打幾個小通氣孔。
3. 放進微波爐中以中溫 (medium) 加熱 1.5-2 分鐘。
4. 由微波爐取出後仔細攪拌，使杯底之粉末或膠質細片重新懸浮，不再著底。
5. 在放入微波爐以高溫 (high) 加熱至煮沸，並保持沸騰 2.-2.5 分鐘，或是確已經完全溶解為止。
6. 由微波爐取出，用蒸餾水補充損失的水量後充分攪拌均勻。

注意：使用未完全溶解的膠片進行電泳分析很容易造成解析度不良與照相不清的情形。