MEBEP TECH(HK) Co., Limited
Email: sales@mebep.com Website: www.mebep.com
Tel: +86-755-86134126 WhatsApp/Facebook/Twitter: +86-189-22896756

low-melting agarose(LM Agarose) powder

Product Number: LM10

Shipping and Storage

Store at room temperature and dry.

Description

The modified low melting point agarose has a finer structure and higher resolution, which is suitable for DNA/RNA electrophoresis. Small fragments of DNA have high resolution for PCR products.

Protocol

1. Prepare an appropriate amount of buffer for electrophoresis and gel preparation. According to electrophoresis needs, prepare appropriate concentrations of electrophoresis and gel preparation buffer.

   Note: The buffer used for electrophoresis and the buffer used for gel making must be the same.

2. Add accurately weighed agar sugar powder (the total liquid volume should not exceed 50% of the capacity of the conical flask) into the conical flask with a certain amount of electrophoresis buffer according to the gel making amount and gel concentration.
3. Heat and dissolve agarose in a microwave oven, set the **medium heat** to boiling, keep the glue boiling for about 30 seconds, wear **heat resistant** gloves, remove the conical flask, carefully shake the conical flask, resuspend the undissolved particles, and heat again at high heat for 1 minute, or until the agarose is completely dissolved. Please wear heat resistant gloves and carefully shake the triangular conical flask to ensure that the agarose gel is fully and evenly mixed.

   Note: It is necessary to ensure that agarose is fully and completely dissolved, and the agarose gel solution is clear at this time. Otherwise, it may cause blurred electrophoresis images. If the glue boils violently and foams during heating, stop heating. The heating time in the microwave oven should not be too long.

4. Cool the solution to around 60℃, and if necessary, add ethyl bromide (EB) solution at this time to achieve a final concentration of 0.5ug/ml, and thoroughly mix.

   Note: Ethyl bromide is a carcinogen. When using a solution containing ethidium bromide, please wear gloves.

5. Pour the agarose solution into the glue making mold, and then insert a comb in the appropriate position. The thickness of gel is generally 3-5 mm.
6. Allow the gel to solidify at room temperature (approximately 30 minutes to 1 hour), and then place it in an electrophoresis tank for electrophoresis.

   Note: When the gel is not used immediately, please wrap the gel with plastic wrap and store it at 4 ℃, generally for 2-5 days.

Agarose concentration and DNA separation range

Linear DNA Size (bP)	500-25,000	300-20,000	200-12,000	150-6,000	100-3,000	50-2,000
Agarose concentration (%) 1×TAE Buffer	0.75	1.00	1.25	1.50	1.75	2.00
Agarose concentration (%) 1×TBE Buffer	0.70	0.85	1.00	1.25	1.50	1.75