

GRS Agarose LMT

#GA115.0050
(for research only)

Product: GRS Agarose LMT is a high purity low melting temperature agarose for analytical and preparative electrophoresis of DNA, RNA, and proteins, and for in-gel reactions.

Applications: GRS Agarose LMT is useful for a broad range of applications, including excellent separation of large DNA fragments and their recovery for further applications, in gel reactions (digestion, ligation, nick translation), isolation of genomic DNA and/or proteins, as well as electrophoresis of RNA or PCR products. Depending on the concentration of GRS Agarose LMT, the size range of nucleic acid separation will vary between 100bp and 10kb, with best results obtained for fragments above 1kb. Optimal resolution will be achieved at concentrations between 0.75% and 1.75%. The low gelling temperature facilitates quantitative recovery of nucleic acids without cutting slices and/or the inclusion of thermo-labile substances, such as living cells or enzymes, in melted agarose.

Quantity: 50g

Appearance: white powder

Storage: Room temperature. Stable for at least 3 years.

Specifications:

DNases/RNases/Proteases.....not detected
DNA Binding.....not detected
Gel strength (1.5%).....>500g/cm²
Gel point (1.5%)..... 26°C (± 2°C)
Melting point (1.5%)..... ≤ 65.5°C
Moisture..... ≤7%
Ash..... ≤0.5%
Sulfate..... ≤ 0.15%
Clarity (1.5%)..... ≤4 NTU
EEO..... ≤0.12

Instructions:

1. Make sure to use a flask more than twice the size of the solution you will prepare
2. Add the desired volume of electrophoresis buffer to the flask
3. Weigh the desired amount of agarose and add to the flask. Swirl well.
4. Heat the mixture in a water bath until 70-80°C and then boil for 5-10 minutes with continuous stirring until the agarose is completely dissolved. Alternatively, heat the mixture in a microwave oven and boil it for 30 seconds. Swirl to resuspend remaining agarose particles and heat again in high power for 1-2 minutes (until the solution is clear and all particles are dissolved).
5. Remove from the microwave or heater, swirl again and allow the solution to cool down to ~60°C before adding any DNA stain (if desired) and pouring to cast the gel.
6. For optimal results, it is highly recommended to keep the gels at +4°C for at least 1 hour before running the gel.

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