



# LM Agarose - bottle - 10 g

Crystallization in agarose gel



## Product codes:

Reference: HR 8092

## Product gallery:



## Product description:

- Gel matrix can reduce nucleation and sedimentation
- Crystallization grade
- Low melting agarose

Low melting (LM) agaroses are the result of a derivatization process by organic synthesis. Essentially, the process generates methoxylate groups from the basic agarose structure. The main properties of these agaroses are their low melting and gelling temperatures when compared with standard agaroses. LM agaroses have lower gel strength than standard agaroses, yet they can be handled easily. LM agaroses have higher clarity (gel transparency) than gels of standard agaroses. LM agaroses have great sieving capacity. The gelling temperature of LM agaroses is 24 to 28°C.

Agarose is a neutral polysaccharide extracted from the cellular walls of Rhodophyceae algae belonging to the genera *Gelidium*, *Gelidiella*, *Pterocladia*, *Gracilaria*, and *Ahnfeltia*, also known as agarophyte seaweed. The structure of the polysaccharide is that of a galactan, formed by linking agarobioses by links 1-3, 1-4. This chemical structure gives agaroses the capacity to form strong gels even at low temperatures. The gels have a macroreticular structure with a very open mesh which can be adjusted simply by varying the concentration of the agarose. The macroreticulate structure of the agarose gel is formed by hydrogen bonds, which makes the gel reversible, transforming the gel into a solution by heating. The hysteresis (difference between gelling and melting temperature) is greater than any other hydrocolloid. The absence of ionic groups makes



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the gel a neutral structure. With no interaction, macromolecules can migrate through the gel mesh, making the gel an efficient sieve for biological macromolecules.

The LM Agarose offered by Hampton Research is 100% pure, does not contain any additives, does not contain ligation inhibitors, and is free of DNAses and RNAses. Hampton Research LM agarose is clearer than other agaroses and also has a higher gel strength.

Per maggiori informazioni visita il sito <https://hamptonresearch.com/>

**Product features:**

CRF - TIPO: Low Melting Agarose Gel