Agarose LM

Cat. 8050

It is used in gels and to form support structures.

Practical information

Industry: Molecular biology / PCR and Electrophoresis / Cloning / Proteomics / NGS

Principles and uses

Agarose Low Melting (LM) is derivatized by organic synthesis which generates methoxylated groups from the basic agarose structure. The main properties of these agaroses are their low melting and gelling temperatures when compared with standard agaroses.

The low melting temperature allows for the recovery of undamaged nucleic acids at a temperature lower than its denaturing temperature. The low gelling temperature assures the agarose will be in a liquid state at a temperature range where In-Gel manipulations can be performed without prior extraction of the DNA from the gel slice

Some important features are:

- Lower gel strength than standard agaroses. Even so, gels can be handled easily.
- Higher clarity (gel transparency) than gels of standard agaroses.
- Great sieving capacity.

Agarose LM is classified in three categories, depending on the degree of derivatization. Gelling/melting temperatures and gel strength are the most important differences.

Agarose LM is used in electrophoresis of DNA fragments =1000 bp, In-Gel enzymatic processing (digestion, ligation, PCR), preparative electrophoresis and, analysis and recovery of large DNA fragments for further applications.

Physical-chemical characteristics

Description	Specification
Ash	<0,4%
Sulfate	<0,12%
Clarity 1,5 % (NTU)	< 4
Gel strength 1,5% (g/cm2)	>500
Gelling temperature 1,5 % (ºC)	24-28
Melting temperature 1,5% (ºC)	<65,5
DNase/RNase activity	Non detected
EEO	<0,12
Moisture	< 10%
Gel background	Very low
Color	White
Appearance	Fine, homogeneus powder
DNA resolution	Finely resolved

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC