

Agarose LM Sieve

Cat. 8092

Agarose with a high resolution for DNA fragments smaller than 1000 b.p.

Practical information

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

Principles and uses

Agarose LM Sieve is a low melting temperature agarose with the highest resolving capacity for DNA fragments smaller than 1000 b.p., especially PCR products ranging from 200 to 800 b.p. This agarose is GQT (Genetic Quality Tested) certified. This ensures that In-Gel applications can be performed in remelted agarose, avoiding difficult DNA extraction steps.

Agarose LM Sieve is ideal for digestion by agarase enzymes, making it very easy to recover small DNA fragments suitable for cloning or enzymatic processing.

Agarose LM Sieve can be used at high concentrations, forming gels with excellent clarity and a higher sieving capacity than standard melting agaroses. Due to their high gel strength, Agarose LM Sieve gels are very easy to handle, even at concentrations as low as 2%.

Agarose LM Sieve is used in:

- Electrophoresis of DNA fragments =1000 bp.
- In-Gel enzymatic processing (digestion, ligation, PCR).
- Preparative electrophoresis.
- Analysis and recovery of small DNA fragments for further applications.

Physical-chemical characteristics

Description	Specification
Ash	<= 0,3%
DNase/RNase activity	None detected
EEO	<= 0,10
Moisture	<= 10%
Color	White
Appearance	Fine, homogeneous powder
DNA binding	None detected
Comparative assay of different size DNA fragments	Bands appear sharp and finely resolved
Background fluorescence assay in ethidium bromide	Very low gel background after EtBr staining
In-Gel restriction and ligation(assayed enzymes: EcoRI, HindIII and DNA t4 ligase)	Passes test
Digestion with agarase enzyme and DNA recovery	Passes test
Gel strength 4% (g/cm ²)	>= 1000
Gelling temperature 4% (°C)	<= 35°C
Melting temperature 4% (°C)	<= 65°C
Sulphate	<= 0,12%

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C