

Agarose MS-4

Cat. 8075

For the molecular screening of DNA fragments smaller than 500 b.p.

Practical information

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

Principles and uses

Agarose MS-4 is an agarose for the molecular screening which improve the resolution of DNA fragments with 500 b.p. or less, especially primer fragments.

At 3% concentration, Agarose MS-4 gives a resolution of DNA fragments similar to gels made with polyacrylamide at concentrations of 8%. While MS-4 may be dissolved carefully by microwaving, gels are best prepared by autoclaving.

Some important features are::

- Excellent resolution of DNA fragments lower than 500 b.p., especially smaller primer-sized fragments.
- Forms a very clear, transparent gel, even at concentrations of 5% or higher.
- Efficient mechanical handling at all concentrations. The chances of gels breaking or cracking when handled are greatly minimized.

Physical-chemical characteristics

Description	Specification
Ash	<= 0,3%
DNase/RNase activity	None detected
EEO	<= 0,12
Moisture	<= 10%
Color	White
Appearance	Fine, homogeneous powder
Clarity 3% (NTU)	<= 6
Gel strength 3% (g/cm ²)	>= 500
Gel strength 5% (g/cm ²)	>= 1000
Gelling temperature 3% (°C)	<= 31 °C
Melting temperature 3% (°C)	<= 76 °C
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
Sulphate	<= 0,11%

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C