

HR Agarose

High Resolution

1.2017

A decorative graphic of a molecular structure is positioned on the right side of the page. It features several interconnected nodes of varying sizes and colors, including red, green, and yellow, connected by thin, semi-transparent lines. The nodes are surrounded by concentric circles of the same color, creating a layered, glowing effect. The overall structure is complex and multi-dimensional, suggesting a high-resolution or detailed molecular model.

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HR Agarose High Resolution

The **HR Agarose** is suitable for the separation of small DNA fragments and PCR products of between 20–800 bp. The **HR Agarose** allows the separation of DNA fragments differing by a molecular weight of 2% and provides a good alternative to polyacrylamide electrophoresis.

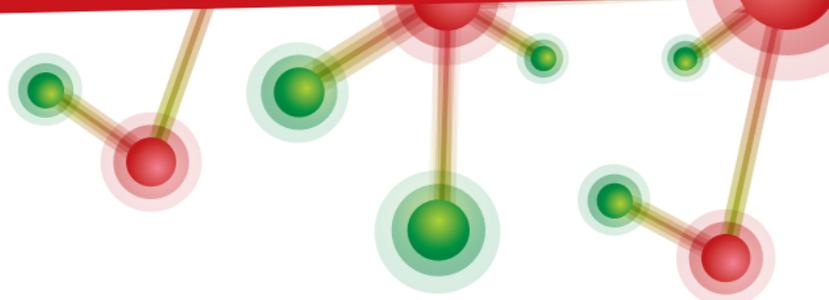
In addition, **HR Agarose** has an excellent clarity of gels at a concentration of as high as 5%. This provides electrophoresis results of a very good clarity. The melting and gelling point of the agarose have lower values when compared to **LE Agarose Standard** and are higher than **LM Agarose Low Melting Point**.

Features and advantages

- Ultra-high resolution, with high clarity and low background
- Medium melting and gelling point values
- High gel strength (easy-to-handle gels)
- No DNase, RNase and protease activity
- High purity (Molecular Biology Grade)

Applications

- Conventional and preparative electrophoresis of DNA and RNA fragments
- Ideal for PCR product separations
- Purification of DNA fragments from the gel for further molecular biology applications
- Analysis of AFLP (*Amplified Fragment Length Polymorphism*), STR (*Short Tandem Repeats*) and tri-/tetranucleotide repeats



Additional considerations

For obtaining the best separation of DNA fragments, the following recommendations should be applied:

DNA size range (bp)	500-800	300-500	100-300	20-100
Percentage of agarose gel (1x TAE buffer)	2.0%	3.0%	4.0%	5.0%
Percentage of agarose gel (1x TBE buffer)	1.8%	2.5%	3.0%	4.0%

Usage

Dissolve the appropriate quantity of agarose in 1x TAE / 1x TBE buffer by heating the suspension in a microwave or water bath. However, the best quality of the high percentage gels (4-5%) can be obtained by autoclaving the suspension for 10 min at 121°C. Cool the solution to approx. 60°C before pouring.

The detection of nucleic acids in agarose gels can be carried out with ethidium bromide or other commercially available stains for DNA visualization.

HR Agarose High Resolution

Component	AG42-005	AG42-010
HR Agarose High Resolution	50 g	100 g

Specification	
CAS No.	9012-36-6
Appearance	White powder
EEO	≤ 0.12
Gel strength (1.5% gel)	≥ 600 g/cm ²
Gelling temperature (3% gel)	≤ 80°C
Melting temperature (3% gel)	≤ 35.5°C
Ash	≤ 0.35%
Moisture	≤ 7%
Sulfate	≤ 0.11%
DNases / RNases	None detected

Storage & shipping

Storage: store at room temperature

Shipping conditions: shipping at ambient temperature

 For research use only

Expiry

The information on the label