

Agaroses for Electrophoresis

Agarose is a natural polysaccharide isolated from agar found in marine algae (sea kelp). Its properties are particularly suited for use as a gel medium for diffusion of biomolecules, especially high MW molecules, including DNA, RNA and other large proteins. Agarose is essentially biologically inert and forms relatively clear, transparent gels, ideally suiting it to applications in electrophoresis. Since it is a natural product, agarose is non-toxic, and its high gel strength permits use of low concentrations. Its macroporous nature allows rapid diffusion of high MW molecules, and agarose gels are thermally reversible making the recovery of separated samples relatively easy. As agarose gels are clear and transparent, staining and destaining may be done quickly with minimal background distortion or coloration. Agarose carries no ionic charge and because it is electrically nonionic it is suitable for isoelectric focusing procedures.

Alfa Aesar is pleased to offer a selection of various agaroses with specific characteristics suited to many different electrophoresis applications. The selection guide below has been designed to help you choose the right agarose for your project.

Agarose Selection Guide

Description→	Agarose, Electro-phoresis Grade	Agarose, GTG	Agarose, D1-LE, Molecular Biology Grade	Agarose MS8, Molecular Sieve Grade	Agarose, High Gel Temp (HGT)	Agarose, Low Gel Temp (LGT)	Agarose, High EEO	Agarose, Low EEO	Agarose, High Melt, High Resolution	Agarose, High Melt, Medium Resolution	Agarose, LM. Low Melting Temp
Application ↓	J66501	J66208	H26855	H26738	J66704	J66319	J60299	J66369	J62714	J61123	H26417
General Electrophoresis											
Antigen Detection											
Cell Culture, Electrophoresis & Cloning											
DNA/RNA Separation											
DNA Small Fragments											
DNA Large Fragments											
Immuno-electrophoresis											
Isoelectric Focusing											
Northern Blotting											
Southern Blotting											
PCR Analysis											
Protein Isolation											
Viral Plague Analysis											

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Item	Description	Application	Sizes
J66501	Agarose, Electrophoresis Grade	Standard agarose suitable for most general applications. Good gel strength and clarity. Gel Strength (1.5%): >1120gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: <0.12	50g, 250g
J66208	Agarose, Genetic Technology Grade	Engineered to permit recovery of active DNA after separation, with minimal inhibition of restriction and ligation enzymes. This agarose has a very high gel strength making it useful for separating nucleic acid fragments larger than 1 kb. Useful in both analytical and preparative electrophoresis applications. Gel Strength (1.5%): >3000gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: <0.12	25g, 100g
J60299	Agarose, High EEO	An Agarose for electrophoresis of serum proteins, immunoelectrophoresis and counter immunoelectrophoresis. Gel Strength: >650gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: 0.23 - 0.26	50g, 100g, 250g
J66369	Agarose, Low EEO	No measurable EEO, suitable for isoelectric focusing, protein blotting and antibody separation. Gel Strength (1.5%): >2400gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: 0.07-0.1	50g, 100g,
A16693	Agarose, Medium EEO	Medium electroendosmosis suitable for electrophoresis of macromolecules and general protein electrophoresis. Gel Strength: >1000gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: 0.16-0.19	5g, 25g
J66704	Agarose, High Gel Temperature, Molecular Biology Grade	High gel strength allows gel formation at low concentrations. Ideal for antibiotic sensitivity assays, RID, double diffusion and other immunological applications. Gel Strength (1.5%): >2045gm/cm ² , Gel Temperature: 42°C, Electroendosmosis: 0.12	25g, 100g
J66319	Agarose, Low Gel Temperature, Molecular Biology Grade	Remains in solution at 31-37°C permitting a second digest on a restriction enzyme fragment. Preferred in cellular antibody production studies. Gel Strength (1.5%): >500gm/cm ² , Gel Temperature: 24-28°C, Electroendosmosis: 0.12	25g, 100g
J62714	Agarose, High Melting Temperature, High Resolution	This agarose is suitable for separation of small fragments of DNA & RNA, and nucleic acids. Gel Strength (1%): 1200gm/cm ² , Gel Temperature: 32-39°C, Electroendosmosis: 0.1-0.2	25g, 100g
J61123	Agarose, High Melting Temperature, Medium Resolution	This agarose is suitable for standard DNA separations. Gel Strength (1%): 1200gm/cm ² , Gel Temperature: 36-39°C, Electroendosmosis: 0.1-0.16	25g, 100g, 500g
H26417	Agarose, LM. Low Melt Temperature	For recovery of samples after separation. This low melting temperature agarose has a high resolving capacity for DNA fragments smaller than 1000 bp, especially PCR products ranging from 200-800 bp. Gel Strength: >200gm/cm ² , Gel Temperature: <26°C, Electroendosmosis: <0.1	5g, 25g, 100g
H26855	Agarose D1-LE, Molecular Biology Grade	General purpose agarose for molecular biology applications. It has a low EEO and high electrophoresis mobility. Suitable for analytical and preparative nucleic acid electrophoresis, blotting and protein electrophoresis. Gel Strength: >1200gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: 0.1-0.14	25g, 100g, 500g
H26738	Agarose MS8, Molecular Sieve Grade	For molecular screening that improves resolution of small DNA fragments and PCR products. Enhanced visibility and high gel strength. Gel Strength: >1400gm/cm ² , Gel Temperature: 36°C, Electroendosmosis: <0.13	25g, 100g

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