Certified Agarose

Genetic Quality Tested. DNA Grade.

Visit bio-rad.com/Agarose for more information.

BIO-RAD

A Full Selection of Quality-Tested Agaroses for Every Research Need

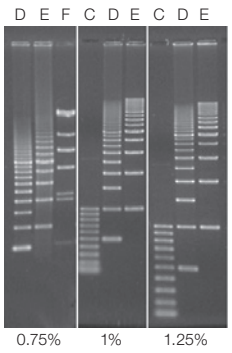
Bio-Rad Certified Agaroses are genetic quality tested (GQT) grade to guarantee product quality and ensure confidence in both routine separations and downstream molecular biology applications. A complete selection of specialty agaroses with application-based names allows you to easily choose the optimal product for your research needs. These ultra pure, high-strength, GQT-grade Certified Agaroses are an outstanding value.

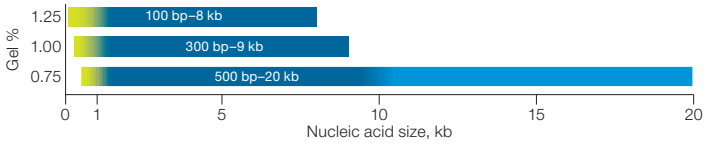
Certified Molecular Biology Agarose

Certified Molecular Biology Agarose is our general-purpose agarose recommended for routine separations of DNA fragments ~100 bp–20 kb. This agarose is used to manufacture 1% ReadyAgarose Precast Gels. Like the entire line of Bio-Rad Certified Agaroses, Certified Molecular Biology Agarose ensures that DNA recovered from a preparative gel can be manipulated without compromising quality. The gels have high strength, so they are easy to handle even at low agarose percentages, and they have a high exclusion limit. Their high electrophoretic mobility increases resolution and reduces run times.

Analytical Specifications and Functional Tests

Specification	Result
Moisture	≤7%
Ash	≤0.25%
Electroendosmosis, $-m_r$	≤0.12
Sulfate	≤0.12%
Clarity, Np	≤40
Gel strength for 1%	≥1,800 g/cm²
Gel strength for 1.5%	≥3,200 g/cm²
Gelation temperature for 1.5%	36°C
Melting temperature for 1.5%	88°C
DNase/RNase activity	None detected
DNA binding	None detected
DNA resolution ≥1,000 bp	Finely resolved
Gel background staining	Very low





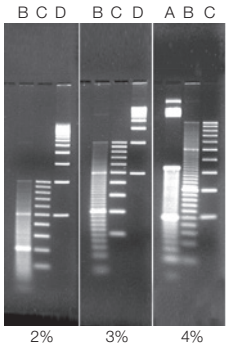
Lane Legend for All Images
A, 10 bp ruler; **B**, 20 bp ruler; **C**, 100 bp ruler; **D**, 500 bp ruler; **E**, 1 kb ruler; **F**, lambda HindIII digest.

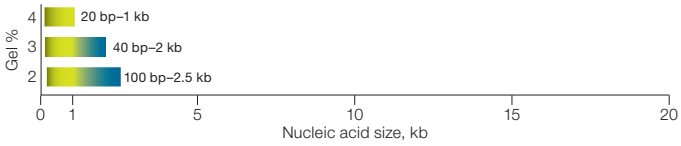
Certified PCR Agarose

Certified PCR Agarose is suggested for separations of DNA fragments 20–1,000 bp. This high-strength agarose forms gels that are easy to handle and remain flexible even at high gel percentages, reducing the risk of cracking or breaking. Unlike GQT products with similar sieving properties, Certified PCR Agarose is a standard gelling temperature agarose, making it faster and easier to prepare.

Analytical Specifications and Functional Tests

Specification	Result
Moisture	≤7%
Ash	≤0.35%
Electroendosmosis, $-m_r$	≤0.12
Sulfate	≤0.11%
Clarity, Np	≤50
Gel strength for 1.5%	≥2,000 g/cm²
Gel strength for 4%	≥4,200 g/cm²
Gelation temperature for 4%	40°C
Melting temperature for 4%	93°C
DNase/RNase activity	None detected
DNA binding	None detected
DNA resolution ≤1,000 bp	Finely resolved
Gel background staining	Very low



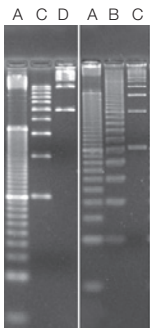


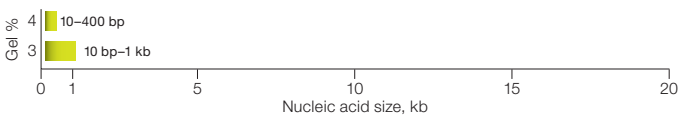
Certified Low Range Ultra Agarose

This agarose provides exceptional resolution of small fragments and primers (~10–600 bp) at lower concentrations than standard gels. A 3% gel clearly resolves a 10 bp ladder, and a 4% gel approaches the resolution of an 8% polyacrylamide gel.

Analytical Specifications and Functional Tests

Specification	Result
Moisture	≤7%
Ash	≤0.35%
Electroendosmosis, $-m_r$	≤0.12
Sulfate	≤0.11%
Clarity, Np	≤50
Gel strength for 1.5%	≥600 g/cm²
Gel strength for 3%	≥1,500 g/cm²
Gelation temperature for 3%	35°C
Melting temperature for 3%	80°C
DNase/RNase activity	None detected
DNA binding	None detected
DNA resolution ≤1,000 bp	Finely resolved
Gel background staining	Very low



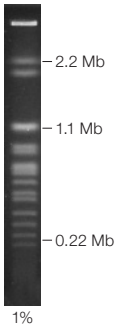


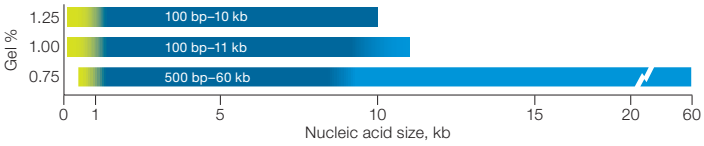
Certified Megabase Agarose

Certified Megabase Agarose has a high exclusion limit, high electrophoretic mobility, and a very high gel strength. This is the optimal choice for clamped homogenous electric field (CHEF) and field inversion gel electrophoresis (FIGE) applications. The gel remains easy to handle at concentrations as low as 0.3% and allows shorter run times. In addition, low background staining provides superior imaging of high molecular weight DNA.

Analytical Specifications and Functional Tests

Specification	Result
Moisture	≤7%
Ash	≤0.25%
Electroendosmosis, $-m_r$	≤0.12
Sulfate	≤0.12%
Clarity, Np	≤40
Gel strength for 1%	≥1,800 g/cm²
Gel strength for 1.5%	≥3,200 g/cm²
Gelation temperature for 1.5%	36°C
Melting temperature for 1.5%	88°C
DNase/RNase activity	None detected
DNA binding	None detected
DNA resolution ≥1,000 bp	Finely resolved
Gel background staining	Very low



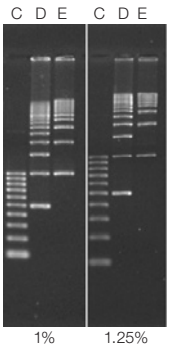


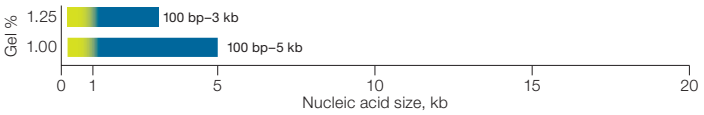
Certified Low-Melt Agarose

This low melting temperature agarose has a high resolving capacity for DNA fragments ≥1,000 bp. It is suggested for preparative electrophoresis and in-gel applications such as digestion, ligation, PCR, transformation, and sequencing. This agarose is also recommended for embedding chromosomes and megabase-sized DNA for pulsed field applications.

Analytical Specifications and Functional Tests

Specification	Result
Moisture	≤7%
Ash	≤0.4%
Electroendosmosis, $-m_r$	≤0.12
Sulfate	≤0.1%
Clarity, Np	≤40
Gel strength for 1%	≥250 g/cm²
Gelation temperature for 1.5%	26°C
Melting temperature for 1.5%	65°C
DNase/RNase activity	None detected
DNA binding	None detected
DNA resolution ≥1,000 bp	Finely resolved
Gel background staining	Very low



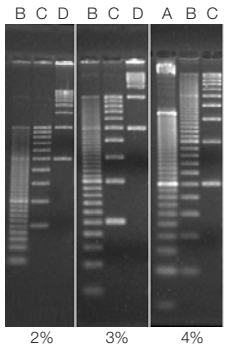


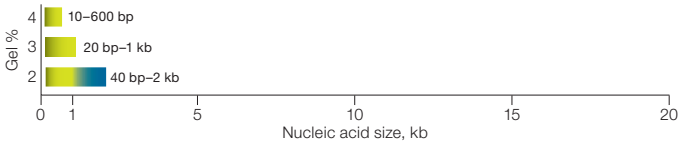
Certified PCR Low-Melt Agarose

Certified PCR Low-Melt Agarose has a high sieving capacity and yields excellent resolution of DNA fragments <1,000 bp in a low-melt or preparative format. This agarose is ideal for digestion by agarase and for all in-gel applications.

Analytical Specifications and Functional Tests

Specification	Result
Moisture	≤5%
Ash	≤0.3%
Electroendosmosis, $-m_r$	≤0.10
Sulfate	≤0.12%
Clarity, Np	≤50
Gel strength for 4%	≥1,000 g/cm²
Gelation temperature for 4%	35°C
Melting temperature for 4%	65°C
DNase/RNase activity	None detected
DNA binding	None detected
DNA resolution ≤1,000 bp	Finely resolved
Gel background staining	Very low



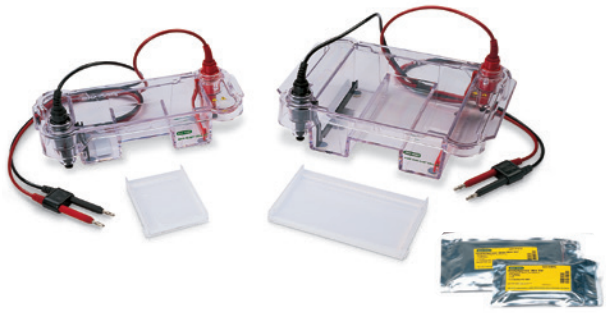


Pulsed Field Certified Agarose

This agarose performs excellent separation and resolution of large DNA in pulsed field gel electrophoresis (PFGE) applications. The optimal separation range is 1 kb–2 Mb. While gels cast with this agarose have longer PFGE run times than Certified Megabase Agarose, running conditions for this agarose are a selectable preset method of the CHEF Mapper XA System's auto-algorithm.

Analytical Specifications and Functional Tests

Specification	Result
Electroendosmosis, $-m_r$	≤0.15
Gel strength for 1.5%	≥2,500 g/cm²
Gelation temperature	38°C
Sulfate	≤0.35%
DNase/RNase activity	None detected
DNA binding	None detected
Gel background staining	Very low



ReadyAgarose Precast Gels, manufactured with Certified Agarose, are also available for your convenience. For more information, refer to bulletin 2648.

Certified Agarose Selection Guide

Application	Agarose						
	Certified Molecular Biology Agarose (100 bp–20 kb)	Certified PCR Agarose (20 bp–1 kb)	Certified Low Range Ultra Agarose (10–600 bp)	Certified Megabase Agarose (1 kb–5 Mb)	Certified Low-Melt Agarose (DNA fragments ≥1,000 bp)	Certified PCR Low-Melt Agarose (DNA fragments <1,000 bp)	Pulsed Field Certified Agarose (1 kb–2 Mb)
Preparative: Quantum Prep methods	•	•	•	•			
Preparative: Low-melt methods					•	•	
Preparative: Agarase methods					•	•	
Preparative: In-gel applications					•	•	
Postpreparative enzymatic treatments	•	•	•	•	•	•	
Tissue/cell culture				•			
Pulsed field sample preparation					•		
Blotting	•	•		•			•
CHEF Mapper XA System auto-algorithm	•			•			•
CHEF Mapper XA System auto-algorithm preset pulsed field method							•

Ordering Information

Catalog #	Size, g
Certified Molecular Biology Agarose	
1613100	25
1613101	125
1613102	500
Certified PCR Agarose	
1613103	25
1613105	500
Certified Low Range Ultra Agarose	
1613106	25
1613107	125
Certified Megabase Agarose	
1613108	25
1613109	125

Catalog #	Size, g
Certified Low-Melt Agarose	
1613111	25
1613112	125
Certified PCR Low-Melt Agarose	
1613113	25
1613114	125
1613115	500
Pulsed Field Certified Agarose	
1620137	100
1620138	500

If you would like samples of Certified Agarose, please contact your local sales representative.

Catalog #	Description
Horizontal Electrophoresis Systems	
1704486	**Mini-Sub Cell GT System**, includes 7 x 7 cm UV-transparent tray, 8- and 15-well combs, casting gates, mini-gel caster
1640300	**Mini-Sub Cell GT System and PowerPac Basic Power Supply**, includes 7 x 10 cm UV-transparent tray, 8- and 15-well combs, gel caster
1704485	**Wide Mini-Sub Cell GT System**, includes 15 x 7 cm UV-transparent tray, 15- and 20-well combs, casting gates, mini-gel caster
1640301	**Wide Mini-Sub Cell GT System and PowerPac Basic Power Supply**, includes 15 x 10 cm UV-transparent tray, 15- and 20-well combs, gel caster

Catalog #	Description
Rulers	
1708351	**EZ Load 20 bp Molecular Ruler**, 20–1,000 bp, 50 bands
1708352	**EZ Load 100 bp Molecular Rule**r, 100–1,000 bp, 10 bands
1708353	**EZ Load 100 bp PCR Molecular Ruler**, 100–3,000 bp, 30 bands
1708354	**EZ Load 500 bp Molecular Ruler**, 500–8,000 bp, 16 bands
1708355	**EZ Load 1 kb Molecular Ruler**, 1–15 kb, 15 bands
Imaging	
12009077	**GelDoc Go Gel Imaging System with Image Lab Touch Software,** includes UV/Stain-Free Imaging Tray
1660531	**UView Mini Transilluminator**, compact long-wave transilluminator with auto safety shutoff, UV safety shield

Visit bio-rad.com/Agarose for more information on Certified Agarose.

Visit bio-rad.com/ReadyAgarose for more information on ReadyAgarose Precast Gels.

Visit bio-rad.com/SubCell for more information on Sub-Cell Electrophoresis Systems. Refer to bulletin 2660 online or request a copy from your local sales representative.

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Bio-Rad PCR reagents and analytical instruments are manufactured under an ISO 13485:2016 certified Quality Management System and are quality control tested to ensure consistent product performance you can trust.

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Canada *1 905 364 3435* ***China*** *86 21 6169 8500* ***Czech Republic*** *00 800 00 24 67 23* ***Denmark*** *00 800 00 24 67 23* ***Finland*** *00 800 00 24 67 23*
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Italy *00 800 00 24 67 23* ***Japan*** *81 3 6361 7000* ***Korea*** *82 2 3473 4460* ***Luxembourg*** *00 800 00 24 67 23* ***Mexico*** *52 555 488 7670*
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Switzerland *00 800 00 24 67 23* ***Taiwan*** *886 2 2578 7189* ***Thailand*** *66 2 651 8311* ***United Arab Emirates*** *36 1 459 6150* ***United Kingdom*** *00 800 00 24 67 23*