FT-31272L

Agaroses

Selected agaroses for electrophoresis

Product Description

Catalog number	EEO (%)	Gel Strength ($g.cm^{-2}$) 1%	1.5%	3%	4%	Gelling Temperature (°C)	Melting Temperature (°C)
Agarose, regular uses 31272L, 500g 31272E, 100g **Agarose, regular uses** *Genetic Quality Tested* 1C8440, 100g	0.05-0.13	>1200	>2500			36 ± 1.5	88 ± 1.5
Agarose, low melting 28449L, 50g	<0.12		>500			26 ± 2	<65.5
Agarose, <1000 bp 05395L, 100g	<0.12		>600	>1500		>35.5	<80
Agarose, <1500 bp 327288, 50g	<0.12		>2000		>4200	>40.5	<93

Introduction:

The agaroses are natural extracted from seaweeds. Free from toxic material, they can be safely used to perform electrophoresis. Uptima's agaroses are dedicated to molecular biology, and are controled for no DNase/RNase activity.

Applications:

Agarose, regular uses:

for >1000bp fragment separation in analytical electrophoresis. Suits for Blotting and DNA typing.

Agarose, regular uses, *Genetic Qality tested*:

for >1000bp fragment separation in analytical electrophoresis. Suits for Blotting and DNA typing.
Recovery of DNA fragments for further applications (enzymatic processing or cloning)

Agarose, low melting:

for >1000bp fragment separation in analytical electrophoresis. Undamaged DNA can be recovered.

Agarose, <1000bp:

improved resolution and clarity for small DNA fragments and PCR products. Easy handling with strong gel structure and high gel strength, that allows use in blotting.

Agarose, <1500 bp:

for all analytical applications, especially when DNA is recovered for subsequent use in enzymatic procedures
Larger gel network than Agarose, <1000bp, with standard gelling temperature High gel strength for firm but still flexible when handled, minimizing the danger of cracking or breaking
Blotting: very good transference for DNA fragments 154 - 2176bp in 4 % gels

Standard concentrations for DNA resolution

	Gel Concentration (%)	Buffer 1X TAE Range (bp)	Buffer 1X TBE Range (bp)
Agarose, regular uses	0.6	20000 - 1000	15000 - 1000
	0.8	12000 - 500	10000 - 500
	1.0	8000 - 300	7000 - 250
	1.2	6000 - 200	5000 - 200
	1.5	3500 - 100	3000 - 100
	2.0	2000 - 50	2000 - 50

	Gel Concentration (%)	Buffer 1X TAE Range (bp)	Buffer 1X TBE Range (bp)
Agarose, low melting	0.75	20000 – 500	12000 – 500
	1.00	16000 – 300	8000 – 300
	1.25	10000 – 250	4000 – 200
	1.50	5000 – 200	3000 – 150
	1.75	2500 – 100	2000 – 100
	2.00	1500 - 50	1000 - 50
Agarose, <1000bp	2.0	1500 – 100	1200 – 100
	3.0	1000 – 50	700 – 40
	4.0	500 – 20	200 – 20
	5.0	300 - 10	<100

Dissolving Agarose, standard uses

Method 1: Microwave (recommended for ≤ 2% concentrations)

- Using a flask 2-4 times the desired solution volume, add cold buffer and a stir bar.
- Put the flask on a plate magnetic stirrer and slowly sprinkle the agarose powder while stirring constantly to prevent the formation of agarose clumps. Remove the stir bar. Let to hydrate the powder during 15 minutes at least.
- Weigh the flask and solution before heating.
- Place in the microwave and heat on high power for two minutes.
- Remove carefully as any microwaved solution may become superheated and foam over when agitated. Gently swirl to re-suspend any agarose particles.
- Reheat on high power using 15-20 second intervals or until the solution comes to a boil, and solution is complete.
- Remove carefully and gently swirl.
- Return the flask to its original weight by adding warm distilled water.
- Mix gently and cool to 50-60°C (at room temperature for at least 10 minutes) before pouring into tray.

Method 2: Boiling water bath

- Using a flask 2-4 times the desired solution volume, add cold buffer and a stir bar
- Put the flask on a plate magnetic stirrer and slowly sprinkle the agarose powder while stirring constantly to prevent the formation of agarose clumps
- Weigh the flask and solution before heating.
- Bring the solution to a boil while stirring and allow to gently boil for approximately 15-20 minutes or until the agarose dissolves completely.
- Return the flask to its original weight by adding warm distilled water.
- Mix gently and cool to 50-60°C (at room temperature for at least 10 minutes) before pouring into tray.

Related Documents and Products

- 100 bp ladder, FT-S54811
- 1 kb ladder, FT-S54801
- GelRed, nucleic acid gel stain, 10000X FT-BY1740
- CooBlue Protein Gel Stain FT-47255A

For *in vitro* R&D use only

Ordering information

Catalog size quantities and prices may be found at http://www.interchim.com.
For any information, please ask: Uptima / Interchim Hotline: +33 4 70 03 73 06