



Universal agarose

Data sheet

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|-------------------------|------|
| Order No.: BS 20.46.050 | 5g |
| Order No.: BS 20.46.100 | 100g |
| Order No.: BS 20.46.500 | 500g |

(For research and *in vitro* applications only)

Batch No.:

Best before:

Appearance: homogeneous powder

Colour: white

| | | |
|---|--|--|
| Bio&SELL Lohweg 27 90537 Feucht bei Nürnberg | E-Mail: info@bio-sell.de Internet: www.bio-sell.de | Fon : +49 (0) 9128 – 724 32 32 Fax : +49 (0) 9128 – 724 32 33 |
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Universal agarose

Description

The Bio&SELL Universal agarose is a standard agarose, which is ideal for analytical and preparative separation of nucleic acids in the range of 50bp to 50.000bp.

Characteristics

| | setpoint | actual value |
|------------------------------|-----------------------------|------------------------|
| gel strength (1,0%) | $\geq 1.200 \text{ g/cm}^2$ | 1.333 g/cm^2 |
| gelation temperature (1,5 %) | 34 – 38 °C | 37,0 °C |
| elektroendosmosis(-mr) | $\leq 0,12$ | 0,10 |
| sulfate content | $\leq 0,14 \%$ | 0,05 % |
| water content | $\leq 8,5 \%$ | 7,5 % |
| DNA binding | undetectable | undetectable |
| DNase and RNase activity | undetectable | undetectable |



Universal agarose

Handling

Caution: Always wear suitable eye protection when preparing agarose and protect yourself and others from the boiling solution!

Preparation of agarose - Method: Microwave

1. Select a piston which can accommodate two to four times the volume of gel solution.
2. Give room tempered electrophoresis buffer and stir bar into the flask.
3. Set piston on a magnetic stirrer and add agarose. Thereby quickly stir to avoid lumps.
4. Remove stir bar if not teflon-coated.
5. Weigh piston and seal with plastic wrap.
6. Provide the plastic foil with a small vent hole.
7. Heat the flask in the microwave at high power, until bubbles appear.
8. Swirl flask gently to resuspend settled agarose and gel pieces.

Warning: boiling retardation!

9. Again heat at high power until the solution boils.

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10. Boil for one minute or until the agarose is completely dissolved.
11. Swirl flask carefully and thereby mix the solution thoroughly.
12. Again, weigh and balance lost weight by the addition of warm, distilled water. Mix well.
13. Before pouring of the gel: let the solution cool down until a temperature of 50 - 60 ° C is reached.

Note:

For 100 ml of a 1% agarose gel, prepare 1 g of agarose in 100 ml of electrophoresis buffer.

Note:

For autoclaving, close the vessel properly and autoclave the agarose wherever possible in the liquid state.

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Universal agarose

Technical Data

Gel strength of agarose: The gel strength, expressed in g/cm² at a given agarose concentration gives information about the stability or strength of the final gel.

Gel point of agarose: In this temperature range the aqueous agarose solution forms a gel as it cools.

Elektroendosmosis of agarose: In agaroses cations (sulfate ester) are located that produce an electroosmotic flow towards the negative pole during application of an electric field. Due to this effect the migration of negatively charged nucleic acids towards the positive pole is undesirably affected. A low electroendosmosis level <0.12 thus marks a high-quality agarose.

Sulfate content of agarose: A low sulfate content is characteristic for a high-quality agarose.

Shipment: at room temperature

Storage: at room temperature

Safety warnings and precautions: This product and its components should be handled only by persons trained in laboratory techniques. It is advisable that suitable protective clothing, such as laboratory overalls, safety glasses and gloves, are worn. Care should be taken to avoid contact with skin or eyes. In case of contact wash immediately with water.

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Universal agarose

Other products that might interest you:

Bio&SELL DNA-Markers and DNA-Ladders

The Bio&SELL DNA-Markers and DNA-Ladders are characterized by sharp bands and excellent resolution in every size range.

Bio&SELL

100 bp DNA- Ladder including loading buffer

Suitable for the size determination of double-stranded DNA in the range between 100 bp and 1,500 bp.

1 x 50ug for 46,90 EUR plus MwSt.

Bio&SELL

1 kb DNA-Ladder including loading buffer

Suitable for sizing double-stranded DNA in the range between 250 bp and 10 kb.

1 x 50ug for 46,90 EUR plus MwSt.

| bp | Größe (bp) | DNA-Gehalt (ng/µl) |
|--------|-------------|--------------------|
| 1500 | 1.500 | 150 |
| 1000x2 | 1.000 (x 2) | 200 |
| 900 | 900 | 120 |
| 800 | 800 | 110 |
| 700 | 700 | 70 |
| 600 | 600 | 80 |
| 500x2 | 500 (x 2) | 150 |
| 400 | 400 | 50 |
| 300 | 300 | 30 |
| 200 | 200 | 20 |
| 100 | 100 | 20 |

**Bio&SELL
DNA-Markers:**

Sharp in every size range!

www.bio-sell.com/molecular-biology/dna-marker-and-ladders.html

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Universal agarose

Other products that might interest you:

Bio&SELL

Low Melt Agarose

Bio&SELL Low Melt Agarose is a high-quality agarose with a relatively low melting point, ideal for the separation of nucleic acids in the range of 0,8 – 25 kbp. Due to its high-resolution capabilities it is suitable for all preparative gel electrophoresis.

25g for 94,90 EUR plus MwSt.

Bio&SELL

High-definition Agarose

Bio&SELL High-definition agarose as an alternative to labor-intensive, expensive polyacrylamid gels. It is optimized for the separation of nucleic acids in the range of 20bp – 800bp.

25g for 81,90 EUR plus MwSt.



The agaroses with the best price-performance ratio:

www.agarose.de

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