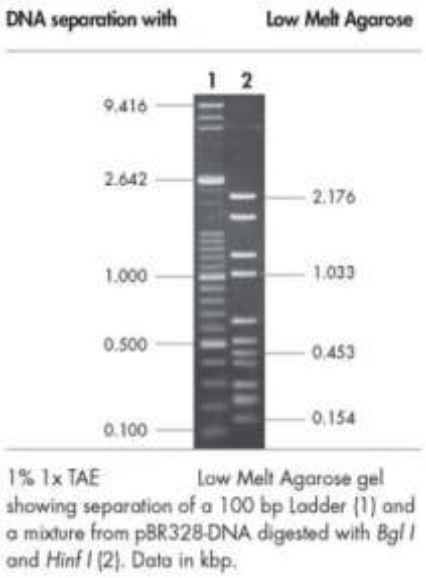
LOW Melt Agarose

Low Melt Agarose is a specialist agarose for the isolation of nucleic acid fragments between 80 bp and 20 kbp. Low Melt Agarose melts at lower temperatures forming very transparent gels and is suitable for all standard 'in gel' techniques.

Separation range:
DNA: approx. 0.08 kbp – 20 kbp

RNA: approx. 0.30 kb – 10 kb



1% 1x TAE Low Melt Agarose gel showing separation of a 100 bp Ladder (1) and a mixture from pBR328-DNA digested with *Bgl I* and *Hinf I* (2). Data in kbp.

Quality:

'Molecular Biology Grade'

- Certified free of DNases and RNases
- No DNA binding
- High lot-to-lot consistency

Characteristics:

High separation properties and sharp band patterns

Easy solubility without foaming

Excellent optical transparency

Analytical specifications:

- Gelling temperature: ≤ 31 °C
- Melting temperature: ≤ 66 °C
- Electroendosmosis: ≤ 0.140
- Gel strength (1.5 %): ≥ 200 g / cm^2
- Sulphate content: ≤ 0.10 %
- Water content: ≤ 10.0 %

Safety instructions:
Always wear eye protection when preparing agarose gel solutions and protect yourself and others against boiling liquids. Refer to the material safety data sheet for further safety and handling instructions.

Manufactured and quality-controlled in accordance with ISO 9001:2000

- Shipment at ambient temperatures
- Storage at room temperature

.. a good decision ..

GeneON -Germany
Contact Phone +49-(0)-621- 5720 864 Fax: +49-(0)-621-5724 462
E-Mail: mailto:info@geneon.net WEB: http://www.GeneOn.net Version: 10.2009 UK

Usage:

Method 1: Microwave oven

1. Pour buffer (approx. 90 % of final volume) into an appropriate flask that can accommodate up to four times the final gel volume and add a magnetic stir bar.
2. Put the flask onto a magnetic stirrer and slowly add agarose powder while stirring constantly to avoid clotting.
3. Remove magnetic stir bar.
4. Add remaining buffer up to the desired final volume.
5. Weigh and record the weight of the flask prior to heating. Heat for 1 – 2 minutes in a microwave oven (600 Watt). Gently swirl the flask to mix the solution. Warning: Due to microwave heating, there may be a delay in the liquid boiling!
6. Using the microwave oven, heat in short bursts of 5 – 10 seconds or until the solution is boiling, with breaks of 10 – 15 seconds between heating phases to disperse bubbles by gently swirling the flask. Beware of hot glass ware and liquid. Continue until the agarose is completely dissolved.
7. Again, weigh the flask and top up lost volume with warm, deionized water. Gently swirl the flask to ensure complete mixing.
8. Let the solution cool down at room temperature for 15 – 20 minutes or until a gel temperature of 50 – 60 °C is reached.

Method 2: Simmering water bath

1. see method 1: steps 1 – 2 and 4
2. Weigh and record the weight of the flask prior to heating. Heat agarose suspension up in a simmering water bath with constant stirring.
3. Leave the flask in the water bath for further 15 – 20 minutes, or until the agarose is completely dissolved.
4. Switch off the magnetic stirrer and leave the flask in the bath for further 15 minutes.
5. Again, weigh the flask and top up lost volume with warm, deionized water. Gently swirl the flask to ensure complete mixing.
6. Let the solution cool down at room temperature for 15 – 20 minutes or until a gel temperature of 50 – 60 °C is reached.

Storage: room temperature for more than 4 years

Ordering information:

Cat.-no	Description	Amount
605-010	Low melt Agarose	10 gr
605-025	Low melt Agarose	25 gr
605-100	Low melt Agarose	100 gr

GeneON -Germany
Contact Phone +49-(0)-621- 5720 864 Fax: +49-(0)-621-5724 462
E-Mail: mailto:info@geneon.net WEB: http://www.GeneOn.net Version: 10.2009 UK