

AS-108 D-5 Agarose (Pulsed Field Gel Electrophoresis)

D-5 Agarose is a linear polymer with a very high molecular weight, giving gel structures unlike those of traditional agaroses. This characteristic, added to the very low sulfate content, produces a strong intercatenary interaction, yielding a gel with very high gel strength and higher exclusion limit.

Features:

- Extremely high gel strength allowing for lower gel concentrations (0.3%), enabling it to be used not only with high molecular weight nucleic acids, including chromosomes, but also with large sized particles like viruses and ribosomes.
- High electrophoretic mobility. DNA mobility is greater when compared with D-1LE. Electrophoresis times are reduced depending upon buffer and agarose concentration used.
- Easy preparation of the gel by simple dissolution in aqueous buffers either by standard boiling or microwaving.
- Greater thermal stability due to high hysteresis (difference between gelling and melting temperatures).
- Exceptionally low absorption of staining agents.
- Absence of toxicity.

Applications:

- Conventional Electrophoresis: can be used in a wide range of concentrations.
- Pulsed Field Gel Electrophoresis: because of its higher exclusion limit, larger molecules can be separated.
- Blotting.
- Agarose Beads preparation.
- Cell and enzyme immobilization.

The product is stable for one (1) year upon receipt.

Specifications:

*EEO (electroendosmosis)

| AS-108 D5 Agarose PF (Gel Electrophoresis) | |
|---|-----------------|
| Lot. N° | D00007 |
| Moisture | ≤ 6.40% |
| Ash | ≤ 0.15 % |
| EEO* | ≤ 0.11 |
| Sulfate | ≤ 0.080% |
| Clarity (NTU) | ≤ 2.60 |
| Gel Strength (g/cm ²) | ≥ 1,850 |
| Gel Strength 1.5% (g/cm ²) | ≥ 4.020 |
| Gelling Temperature (°C) | 36,2 |
| Melting Temperature (°C) | 88,1 |
| DNase/RNase activity | None Detected |
| DNA resolution ≥ 1000 bp | Finely Resolved |
| Gel background | Very Low |

