

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.

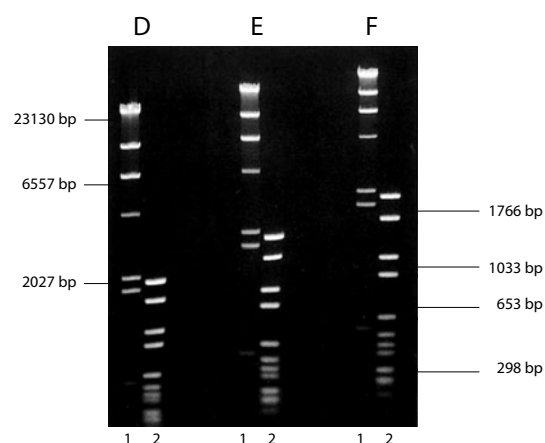
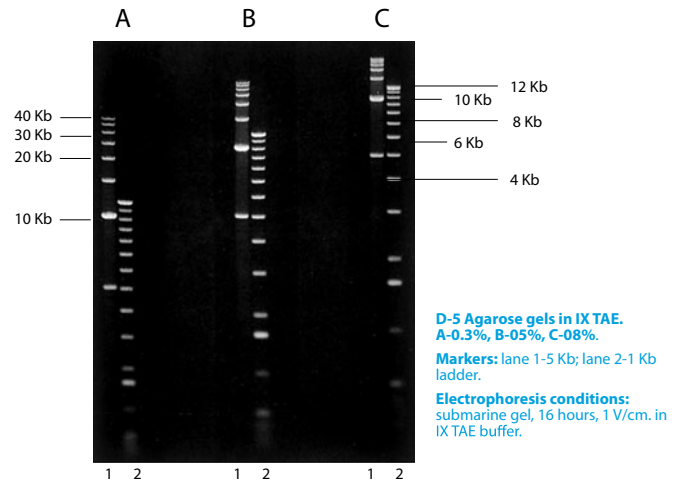
FEATURES

- ✓ *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.*

As shown in the following photographs, D-5 Agarose is suitable for a wide variety of ranges, by modifying its concentration.



SPECIFICATIONS & FUNCTIONAL TESTS

* EEO (electroendosmosis)

	D-5
Moisture	≤ 10%
Ash	≤ 0.25%
EEO*	≤ 0.12
Sulfate	≤ 0.12%
Clarity 1.5% (NTU)	≤ 4
Gel Strength 1% (g/cm ²)	≥ 1800
Gel Strength 1.5 % (g/cm ²)	≥ 3200
Gelling Temperature 1.5% (°C)	36 ± 1.5
Melting Temperature 1.5% (°C)	88 ± 1.5
DNase/ RNase activity	None detected
DNA resolution ≥ 1000 bp	Finely resolved
Gel background	Very low