

## AS-110      AGAROSE NuSieve 3:1

NuSieve 3:1, a standard gelling/melting temperature agarose, is designed for analytical electrophoresis where high resolving capacity is required. DNA fragments 30 -1500 bp and PCR products < 1000bp can be finely resolved.

The viscosity is low, so it is easy to make gels at high concentrations which have a very high resolving capacity. Solutions of 4% or higher are feasible because of this low viscosity.

Because of the high gel strength, gels can also be prepared at lower concentrations, 1.0-1.5%. Gels are strong, flexible and very easy to handle.

These features make NuSieve 3:1 gels compatible with blotting of small fragments.

### Applications:

- Analytical and high resolution separations
- Blotting techniques

### Functional test:

- DNA resolution: bands appear clear, sharp and finely resolved
- DNase/RNase activity: none detected
- Gel background: very low after EtBr staining
- Blotting: very high transference of small DNA fragments, even at high concentration
- DNA binding: very low

### Specifications:

AGAROSE	NU-SIEVE 3 :1
Moisture:	4.66 %
Ash	0.35 %
EEO*	0.12
Sulfate:	0.091 %
Clarity 1.5% (NTU):	2.58
pH in solution 1.5% :	6.60
pH in gel 1.5%:	6.65
Colorimetry (Absorbance) nmu 450	0.033
Gel Strength 1,5% (g/cm <sup>2</sup> ):	2.195
Gel Strength 4% (g/cm <sup>2</sup> ):	5.180
Gelling Temperature 4 % (°C):	39.5°C
Melting Temperature 4 % (°C):	80.2 °C
DNase/Rnase activity:	None
Gel Background:	Very low

\* EEO (electroendosmosis)

Ranges of separation:

2%	500 – 1500 bp
4%	150 – 600 bp