FISHER MOLECULAR BIOLOGY

AS-109 AGAROSE MS-8 (METAPHOR)

An agarose for molecular screening that improves resolution of small DNA fragments and PCR products. Recommended for analytical gels for DNA ≤1,200 bp.
The key to producing the MS (Molecular Screening) agaroses is harvesting the appropriate seaweed at precise time in its growth cycle. There are also certain modifications in the chemical structure of the polymer during the manufacturing process. Fisher Molecular Biology has produced MS-8 Agarose for applications that require efficient separation of small DNA fragments and PCR products.

Features:

- High resolution of short PCR products and DNA fragments.
- Improved clarity of the gel, enhancing visibility.
- Better handling than competitive products because of a stronger gel structure and higher gel strength. The chances of gels breaking or cracking when handled are greatly minimized, even with lower concentrations of agarose.
- High gel strength allows use in blotting.

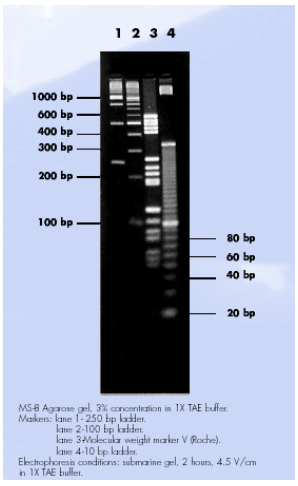
Functional Tests:

- DNA resolution: bands appear sharp and finely resolved.
- DNAse/RNAse activity: none detected.
- Gel background: very low after EtBr staining.
- DNA binding: very low.

Specification:

AS-109	AGAROSE MS-8 (METAPHOR)	Lot. M00041
Moisture:	6.92 %	
Ash:	0.31 %	
EEO*	0.11	
Sulfate:	0.077 %	
Clarity 1.5% (NTU):	3.23	
pH in solution:	7.09	
pH in gel:	7.17	
Gel Strength 1,5% (g/cm^2):	1.630	
Gel Strength 3% (g/cm^2):	3.200	
Gelling Temperature 3 % (°C):	31.5°C	
Melting Temperature 3 % (°C):	76.4 °C	
DNase/Rnase activity:	None detected	
Gel Background:	Very low	

* EEO (electroendosmosis)



MS-8 Agarose gel, 3% concentration in 1X TAE buffer.
Markers: lane 1-250 bp ladder.
lane 2-100 bp ladder.
lane 3-Molecular weight marker V (Roche).
lane 4-10 bp ladder.
Electrophoresis conditions: submarine gel, 2 hours, 4.5 V/cm in 1X TAE buffer.

Ranges of separation:

1.8%	400 – 1200 bp
3.0%	150 – 800 bp
4.5%	15 – 400 bp

These ranges are approximate and have been calculated in 1X TAE buffer. To achieve the best resolution of MS- 8 agarose gels, they should be stored at 4° - 8° C for 30 minutes before use.

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