

This molecular screening agarose is designed to have a larger gel network than MS-8 and is recommended for use in the separation of DNA fragments smaller than 1500 bp.

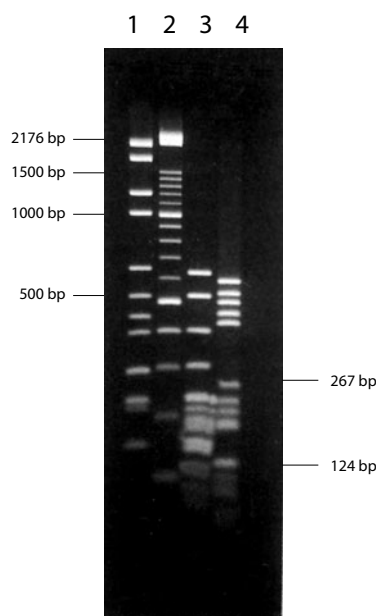
Gels made with MS-12 have higher gel strength than competitive products. The gel is exceptionally firm but still flexible when handled, minimizing the danger of cracking or breaking.

MS-12 has the same melting and gelling temperature as regular agaroses, allowing faster and easier preparation of gels. MS-12 also gives excellent resolution at concentrations of  $\leq 1\%$ .

MS-12 Agarose is recommended for all analytical applications, especially when DNA is recovered for subsequent use in enzymatic procedures.

## FUNCTIONAL TESTS

- ✓ DNA resolution: bands appear sharp and finely resolved.
- ✓ DNase/RNase activity: none detected.
- ✓ Gel background: very low after EtBr staining.
- ✓ Blotting: very good transference for DNA fragments 154 – 2176 bp in 4 % gels.
- ✓ DNA binding: very low.



MS-12 Agarose gel, 2% concentration in 0.5X TBE buffer.

**Markers:**

lane 1 - pBR328DNA, BglII+pBR328DNA, HinfI;  
lane 2 - 100 bp ladder;  
lane 3 - pBR322DNA, MspI;  
lane 4 - Molecular weight marker V (Roche).

**Electrophoresis conditions:** submarine gel, 2 hours, 4.5 V/cm in 0.5X TBE buffer.

## SPECIFICATIONS

\* EEO (electroendosmosis)

	1.5%	4%
Moisture	$\leq 10\%$	
Ash	$\leq 0.35\%$	
EEO*	$\leq 0.12$	
Sulfate	$\leq 0.11\%$	
Clarity (NTU)	$\leq 5$	
Gel Strength (g/cm <sup>2</sup> )	$\geq 2000$	$\geq 4200$
Gelling Temperature (°C)	$\leq 40$	
Melting Temperature (°C)	$\leq 93$	

## RANGES OF SEPARATION

2%	500 – 1500 bp
4%	150 – 600 bp

These ranges are approximate and have been calculated in 1X TAE buffer.