

# Product Name : Mannitol Motility Test Agar

Medium for differentiation of *Enterobacteriaceae*.

## FORMULA (G/L)

Peptone ..... 20.0  
Mannitol ..... 2.0  
Potassium Nitrate ..... 1.0  
Phenol Red ..... 0.04  
Agar ..... 5.0  
Final pH = 7.3 ± 0.2 at 25°C.

## DIRECTIONS

Suspend 28.04 G of powder in 1 L of distilled or deionized water. Heat to boiling and shake until completely dissolved. Dispense in final tubers. Sterilize at 121°C for 15 minutes.

## DESCRIPTION

Mannitol Motility Test Agar is a semisolid medium used for the detection of motility of *Enterobacteriaceae*.

## TECHNIQUE

Inoculate tubes with a pure culture by stabbing the center of the column of medium to greater than half the depth. Incubate tubes for 24-48 hours at 35 ± 2°C in an aerobic atmosphere.

## QUALITY CONTROL

### Dehydrated medium

Appearance: fine, homogeneous.

Color: beige.

### Prepared medium

Appearance: clear to slightly hazy.

Color: pale to light, yellow to tan.

Incubation conditions: 36 ± 1°C / 40-48 hours.

| Microorganism                 | ATCC  | Growth | Motility |
|-------------------------------|-------|--------|----------|
| <i>Escherichia coli</i>       | 25922 | good   | +        |
| <i>Enterobacter aerogenes</i> | 13048 | good   | +        |
| <i>Klebsiella pneumoniae</i>  | 13883 | good   | -        |
| <i>Salmonella typhimurium</i> | 14028 | good   | +        |

## STORAGE

The powder is very hygroscopic: store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared media at 2-6°C.

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### REFERENCES

1. Tittsler and Sandholzer. 1936. J. Bacteriol. *31*:575.
2. Holt, Krieg, Sneath, Staley and Williams (ed.). 1994. Bergey's Manual™ of determinative bacteriology, 9th ed. Williams & Wilkins, Baltimore, Md.
3. Farmer. 1999. *In* Murray, Baron, Pfaller, Tenover and Tenover (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
4. MacFaddin. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md.

### PACKAGING

|                                                   |       |
|---------------------------------------------------|-------|
| Cat. No : MB-M1235<br>Mannitol Motility Test Agar | 500 G |
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