

Mannitol Motility Test Medium**(M1650)**

Mannitol Motility Test Medium is recommended for determining motility and mannitol fermentation activity of microorganisms.

Composition

Ingredients	g/ L
Peptic Digest of Animal Tissue	20.00
Mannitol	2.00
Potassium Nitrate	1.00
Phenol Red	0.04
Agar	3.00

Description

The highly nutritious peptic digest of animal tissue supports luxuriant growth of fastidious bacteria like Staphylococci. Semisolid nature of the medium due to 0.3% agar helps to detect motility. Motile bacteria produce diffused growth throughout the medium while non-motile bacteria grow only along the line of inoculation. Fermentation of mannitol produces acidity in the medium. Phenol red is the pH indicator, which detects acidity by exhibiting a visible colour change from red to yellow.

Type of specimen

Clinical samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines. After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture.

Limitations

1. It is not a confirmatory test hence complete identification should include the morphology, gram reaction, biochemical and serological tests.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality control**Physical/Chemical control**

Color : Red pH: 7.40-7.80

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Microbiological activity

Organisms	Growth	Mannitol fermentation	Motility
Staphylococcus aureus ATCC 25923	Good growth	positive reaction, yellow colour	negative, growth along the stabline, surrounding medium remains clear
Staphylococcus epidermidis ATCC 12228	Good growth	negative reaction, no colour change	negative, growth along the stabline, surrounding medium remains clear
Escherichia coli ATCC 25922	Good growth	positive reaction, yellow colour	positive, growth away from stabline causing turbidity
Proteus mirabilis ATCC 12453	Good growth	negative reaction, no colour change	positive, growth away from stabline causing turbidity

Storage and Shelf Life ,

Store between 2-25°C. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Murray P. R., Baron J. H., Pfaller M. A., Tenover J. C. and Tenover F. C., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
2. Quality Assurance for Commercially Prepared Microbiological Culture Media, M22. Clinical and Laboratory Standards Institute (CLSI - formerly NCCLS)
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.