

MacConkey Agar

DM141

Intended Use

A selective medium for the isolation and identification of enteric bacteria.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone mixture	18.0g/litre
Lactose	10.0g/litre
Sodium chloride	5.0g/litre
Bile salts	0.5g/litre
Neutral red	0.05g/litre
Agar	16.0g/litre
Final pH: 7.3 ± 0.2	

Storage and shelf life

All dehydrated culture media containers should be kept tightly closed and stored in a dry place at 10 to 25°C until the expiry date shown on the pack label.

Precautions

For *in vitro* diagnostic use only. Observe approved hazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Refer to Product Safety Data sheet (available on request or via MAST® website).

Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® selective supplements, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

Procedure

1. Refer to pack label for quantities and volumes required. Prepare MAST® MacConkey Agar (DM141D) by suspending the powder in distilled or deionised water. For sachet packs, dissolve the entire contents of the sachet in the volume shown on the label.
2. Autoclave at 121°C (15 p.s.i.) for 15 minutes.
3. Mix well, pour culture plates (15 to 20ml per plate) and allow to set.
4. Prepared culture plates may be used immediately or stored in plastic bags at 2 to 8°C for up to one week before use.
5. Inoculate plates directly with urine, faeces or rectal swabs. Streak out for single colonies.
6. Incubate plates aerobically for 18 to 40 hours at 35 to 37°C.

Interpretation of results

After incubation record growth of organisms. Typical characteristics to note include colony size, morphology, pigmentation and effect on surrounding medium. The salt content of the medium allows *Proteus* species to swarm.

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate expected performance. Do not use the product if the result with the control organism is incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
<i>Escherichia coli</i> ATCC® 25922	Pink colonies
<i>Proteus mirabilis</i> ATCC® 29906	Colourless colonies
<i>Enterococcus faecalis</i> ATCC® 29212	Small, magenta colonies
<i>Staphylococcus aureus</i> ATCC® 25923	Small, opaque, pink colonies
<i>Salmonella typhimurium</i> ATCC® 14028	Colourless or pale yellow colonies

References

Bibliography available on request.