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Hektoen Enteric Agar

DM134

Intended Use

A differential, selective medium for the isolation of *Shigella* and *Salmonella*.

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Peptone mixture	25.0g/litre
Lactose	10.0g/litre
Sucrose	12.0g/litre
Salicin	1.0g/litre
Sodium chloride	2.0g/litre
Sodium thiosulphate	1.0g/litre
Ferric ammonium citrate	2.0g/litre
Trisodium citrate	1.25g/litre
Bile salts	1.5g/litre
Acid fuchsin	0.025g/litre
Bromo-thymol blue	0.05g/litre
Agar A (RM10)	14.0g/litre
Final pH: 7.2 ± 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® Hektoen Enteric Agar (DM134D) 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. Allow to stand for approximately 15 minutes and bring to the boil until completely dissolved. DO NOT AUTOCLAVE.

3. Allow to cool to 50 to 55°C, 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 faeces, rectal swabs or a subculture from a suitable enrichment medium. Streak out for single colonies.
6. Incubate plates aerobically for 18 to 24 hours at 35 to 37°C. It is important that incubation is not continued beyond 24 hours as this allows reversion of pH in non-pathogens.

Interpretation of results

After incubation record growth of organisms. Typical characteristics to note include: colony size morphology and pigmentation.

Organism	Colonial morphology
<i>Shigella</i> spp	Green, moist colonies
<i>Salmonella</i> spp.	Blue-green colonies with or without black centres
Coliforms	Salmon-pink to orange colonies with surrounding bile precipitation.

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	Partial inhibition
<i>Enterococcus faecalis</i> ATCC® 29212	Partial inhibition
<i>Salmonella typhimurium</i> ATCC® 14028	Growth
<i>Shigella flexneri</i> ATCC® 12022	Growth

References

Bibliography available on request.