

D.C.A. (Hynes)

DM130

Intended Use

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

Contents

See pack label.

Formulation*

Material:	Concentration in medium:
Lactose	10.0g/litre
Sodium citrate	5.0g/litre
Ferric ammonium citrate	1.0g/litre
Sodium thiosulphate	2.5g/litre
Bile salts	2.0g/litre
Peptone	17.0g/litre
Neutral red	0.025g/litre
Agar	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® D.C.A. (Hynes) (DM130D) 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 15 minutes.
3. Bring to the boil until completely dissolved.
DO NOT AUTOCLAVE.
4. Cool to 50°C and mix well. Pour culture plates (15 to 20ml per plate) and allow to set.
5. Prepared culture plates may be used immediately or stored in plastic bags at 2 to 8°C for up to one week before use.

6. Inoculate plates by surface plating, streaking out for single colonies.
7. Incubate plates aerobically for 18 to 40 hours at 35 to 37°C. Read results at 24 hours.

Interpretation of results

After incubation record growth of organisms. Lactose fermenting organisms are mainly inhibited but may give pink colonies with a surrounding precipitate. Certain late lactose fermenting organisms e.g. *Shigella sonnei*, may become pale pink if incubation is extended to 40 hours. Most salmonella and shigella are non-lactose fermenting and appear as colourless colonies; salmonella often with a black central dot indicative of H₂S production.

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	Significant or complete inhibition
<i>Enterococcus faecalis</i> ATCC® 29212	Significant or complete inhibition
<i>Salmonella typhimurium</i> ATCC® 14028	Growth, colourless to pink colonies
<i>Shigella flexneri</i> ATCC® 12022	Growth, colourless to pink colonies

References

Bibliography is available on request.