

D.C.L.S. Agar Plate

MP160

IntendeUse

Recommended a selective medium used to detect and isolate *Salmonella* and *Shigella* species. Also useful for isolation of *Vibrio cholerae*.

Composition**

Ingredients	g/ L
Proteose peptone	7.000
HM peptone B #	3.000
Lactose	5.000
Saccharose (Sucrose)	5.000
Sodium citrate	10.000
Sodium thiosulphate	5.000
Sodium deoxycholate	2.500
Neutral red	0.030
Agar	12.000
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Equivalent to Meat extract B

Directions

Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Principle And Interpretation

Salmonella infection leads to salmonellosis, which ranges clinically from self-limited gastroenteritis (diarrhea, abdominal cramps and fever) to enteric fevers (including typhoid fever). *Shigella* species cause classical bacillary dysentery characterized by severe cramping abdominal pain and diarrhea with blood and mucus. D.C.L.S. Agar is a modification of Deoxycholate Citrate Agar of Leifson (1). It is a slightly selective and differential medium, which incorporates sucrose as an additional fermentable carbohydrate to differentiate lactose negative sucrose positive coliforms from *Salmonella* species. The addition of sucrose to this medium increases its usefulness because non-pathogenic sucrose fermenting organisms like *Proteus*, *Enterobacter*, *Klebsiella* form red colonies. D.C.L.S. Agar is a moderately selective culture medium which also supports the growth of *Vibrio* species.

Type of specimen

Clinical samples - Stool samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).

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. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

1. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
2. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's requirement.
3. Further serological and biochemical testing is required for complete identification.

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

Appearance

Sterile D.C.L.S. Agar in 90 mm disposable plates with smooth surface and absence of black particles/cracks/bubbles

Colour of medium

Reddish orange coloured medium.

Quantity of medium

25 ml of medium in 90 mm disposable plates.

pH

7.00-7.40

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Enterococcus faecalis</i> ATCC >=10 ⁴ 29212(*00087)		inhibited	0%	
<i>Escherichia coli</i> ATCC 25922(00013*)	50-100	none-poor	<=10%	red
## <i>Proteus hauseri</i> ATCC 13315	50-100	luxuriant	>=50%	red
<i>Salmonella</i> Typhimurium ATCC 14028(00031*)	50-100	luxuriant	>=50%	colourless- slightly pink
<i>Shigella flexneri</i> ATCC 12022(00126*)	50-100	fair-good	30-40%	colourless- slightly pink

Key : (*) Corresponding WDCM numbers.

(##) Formerly known as *Proteus vulgaris*

Storage and Shelf Life

On receipt store between 20-30°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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1. Leifson E., 1935, J. Pathol. Bacteriol., 40:581.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W.(2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

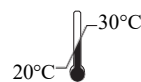
Revision : 03/2024



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IVD *In vitro* diagnostic
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Storage temperature



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CE Marking



**Do not use if
package is damaged**

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