ARENA BioScien

Block 5, Street 9 inside The Ismailia free zone. Ismailia- Egypt
Post Code-41511
Tel.-Fax: +202 21813500/ +202 21813600
Mob.: +2 01211550941/ +2 01119225860
E-mail: sales@arenabioscientific.com
Website: www.arenabioscien.com

D.C.L.S. Agar

D.C.L.S. Agar is used as a selective medium for the isolation of *Shigella* and *Salmonella* .
Also useful for isolation of *Vibrio cholera* .

REF: BS.1/DCLS01.100.0100	100 Gram	REF: BS.1/DCLS01.250.0250	250 Gram
REF: BS.1/DCLS01.500.0500	500 Gram		

CLINICAL SIGNIFICANCE

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.

METHOD PRINCIPLE

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.

MEDIA COMPOSITION

Item	Formula per liter of medium
- Proteose peptone	7.000 gm
- Beef extract	3.000 gm
- Lactose	5.000 gm
- Sucrose	5.000 gm
- Sodium citrate	10.00 gm
- Sodium thiosulphate	5.000 gm
- Sodium deoxycholate	2.500 gm
- Neutral red	0.030 gm
- Agar	12.00 gm

 # Equivalent to Meat extract B

Final pH at 7.2 ± 0.2 at 25 °C

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plentyof soap and water. In case of severe injuries; seek medical adviceimmediately.
- Respect country requirement for waste disposal.

S56: dispose of this material and its container at hazardous or special waste collection point.

S57: use appropriate container to avoid environmental contamination.

S61: avoid release in environment.

For further information, refer to the D.C.L.S. Agar material safety data sheet.

STORAGE AND STABILITY

BioScien D.C.L.S. Agar should be stored between 10-30°C in a firmly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature andsources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

PREPARATION

Suspend 49.53 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. **DO NOT AUTOCLAVE**. Cool to 50°C and pour about 20 ml of medium into sterile Petri plates and allow to dry for about two hours with covers partially removed.

Deterioration

The color of ***BioScien*** D.C.L.S. Agar is Light yellow to pink homogeneous free flowing powder. Prepared Reddish orange coloured, clear to slightly opalescent gel forms in Petri plates. If there are any physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

EQUIPMENT REQUIRED NOT PROVIDED

- Sterile cups
- Sterile petri-dishes
- Incubator

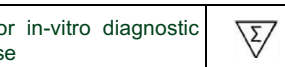
SPECIMEN

Clinical samples, stool samples .

PERFORMANCE CHARACTERISTICS

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

Oranism	Growth	Colony Characteristic
Enterococcus faecalis ATCC 29212	Inhibited	-
Escherichia coli ATCC 25922	None - poor	Red
Proteus vulgaris ATCC 13315	luxuriant	Red
Salmonella Typhimurium ATCC 14028	luxuriant	Colourless - slightly pink
Shigella flexneri ATCC 12022	Fair - good	Colourless - slightly pink

SYMBOLS IN PRODUCT LABELLING			
IVD	For in-vitro diagnostic use		Number of <n> test in the pack
LOT	Batch Code/Lot number		Caution
REF	Catalogue Number		Do not use if package is damaged
	Temperature Limitation		Consult Instruction for use
	Expiration Date		
	Manufactured by		

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact ***BioScien*** technical support.

REFERENCES

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.