

Desoxycholate Citrate Agar



Medium used for the isolation and cultivation of Salmonella and Shigella spp.

• CONTENTS (Liter)

Meat, Infusion	9.5 g
Proteose Peptone No.3	10.0 g
Lactose	10.0 g
Sodium Citrate	20.0 g
Ferric Ammonium Citrate	2.0 g
Sodium Desoxycholate	5.0 g
Neutral Red	0.02 g
Agar	13.5 g
Final pH = 7.5 ± 0.2 at 25°C	

• PROCEDURE

Suspend 70.02 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Cool to 45 - 50°C in water bath. Pour into petri dishes.

• INTERPRETATION

Desoxycholate Citrate Agar is a medium used for the isolation and cultivation of Salmonella and Shigella spp. Meat, infusion and proteose peptone No.3 provide carbon, nitrogen, vitamins and minerals. Lactose is the fermentable carbohydrate. Sodium citrate and sodium desoxycholate inhibit the growth of Gram-positive bacteria and coliforms. Ferric ammonium citrate aids in the detection of H₂S producing bacteria. Neutral red is a pH indicator. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 35 ± 2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance : slightly opalescent

Color: orange red

Incubation conditions: 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	10 ² -10 ³	good	colorless colonies
<i>Shigella flexneri</i>	12022	10 ² -10 ³	good	colorless colonies
<i>Escherichia coli</i>	25922	≥10 ³	partially inhibited	pink colonies
<i>Enterococcus faecalis</i>	29212	≥10 ³	inhibited	-

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Hynes M. (1942). J. Pathol. Bacteriol. 54: 193-207.
2. Farmer III, J.J., and M.T. Kelly. (1991). *Enterobacteriaceae* p 360-383 In Manual of clinical microbiology, 5th ed American Society for Microbiology, Washington, D.C.

• PACKAGE

Cat. No : MB-D1015 Desoxycholate Citrate Agar	500 G
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• MICROBIAL CULTURE IMAGES



Salmonella typhimurium
ATCC 14028 (100CFU)



Enterococcus faecalis
ATCC 29212 ($\geq 10^3$ CFU)

Incubation conditions : 35 ± 2°C / 18 - 24 hours