

Desoxycholate Citrate Agar Modified (Hynes)



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

*Equally use with MFDS (MB-D1015K, MB-D2148K).

• CONTENTS (Liter)

Beef Extract	5.0 g
Peptone	5.0 g
Lactose	10.0 g
Sodium Citrate	8.5 g
Sodium Thiosulfate	5.4 g
Ferric Ammonium Citrate	1.0 g
Sodium Desoxycholate	5.0 g
Neutral Red	0.02 g
Agar	12.0 g
Final pH = 7.5 ± 0.2 at 25°C	

• PROCEDURE

Suspend 51.92 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 Modified (Hynes) is a medium used for the isolation and cultivation of Salmonella and Shigella spp. Beef extract and peptone 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. Sodium thiosulfate and ferric ammonium citrate are components of H₂S indicator system. Neutral red is a pH indicator. Agar is the solidifying agent.

• TECHNIC

Inoculate the specimen using a sterile loop to the medium. Incubate at 36 ± 1°C for 20 - 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: light pink

Incubation conditions: 36 ± 1°C / 20 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	50-100	good	colorless colonies with black centers
<i>Shigella flexneri</i>	12022	≥ 10 ³	fair to 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.
3. Korean Food Standards Codex. Revised at 2014.10.1
4. Refer to the MFDS.

• PACKAGE

Cat. No : MB-D2148 Desoxycholate Citrate Agar Modified (Hynes)	500 G
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