

Hektoen Enteric Agar



Medium used for the isolation and identification of Gram-negative enteric bacilli, especially *Salmonella* and *Shigella* spp.

*Equally use with MFDS (MB-H1421K).

• CONTENTS (Liter)

Peptone	12.0 g
Yeast Extract	3.0 g
Bile Salts No.3	9.0 g
Lactose	12.0 g
Sucrose	12.0 g
Salicin	2.0 g
Sodium Chloride	5.0 g
Sodium Thiosulfate	5.0 g
Ferric Ammonium Citrate	1.5 g
Bromothymol Blue	0.065 g
Acid Fuchsin	0.1 g
Agar	14.0 g
Final pH = 7.6 ± 0.2 at 25°C	

• PROCEDURE

Suspend 75.67 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. Mix well. Pour into petri dishes.

• INTERPRETATION

Hektoen Enteric Agar is a medium used for the isolation and identification of Gram-negative enteric bacilli, especially *Salmonella* and *Shigella* spp. Peptone and yeast extract provide nitrogen, vitamins and minerals. Lactose, sucrose and salicin are included for optimal differentiation by the color of the colonies and of the medium adjacent to the colonies. Sodium chloride maintains the osmotic balance. Bile salts No.3, bromothymol blue and acid fuchsin inhibit the growth of most Gram-positive organisms. Ferric ammonium citrate and sodium thiosulfate are components of H₂S indicator system. Hydrogen sulfide is formed with black precipitates. 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 green

Prepared medium

Appearance: slightly opalescent

Color: green

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

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	50-100	good	greenish-blue with black center
<i>Shigella flexneri</i>	12022	50-100	good	greenish-blue
<i>Escherichia coli</i>	25922	≥ 10 ³	partially inhibited	salmon-orange, may have bile precipitate
<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.

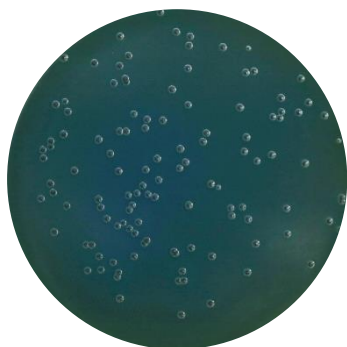
• REFERENCES

1. King, S., and W.I. Metzger (1968). Appl. Microbiol. 16: 577-578.
2. Taylor, W.I., and D. Schelhaut. (1971). Appl. Microbiol. 21: 32-37.
3. Association of Official Analytical Chemists (1996). Official methods of analysis of AOAC International.
4. Refer to the MFDS.

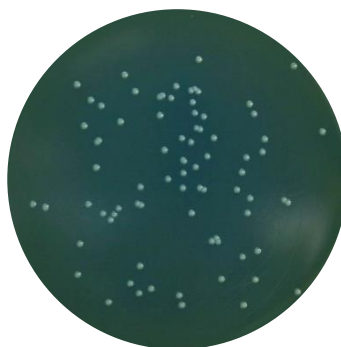
• PACKAGE

Cat. No : MB-H1421 Hektoen Enteric Agar	500 G
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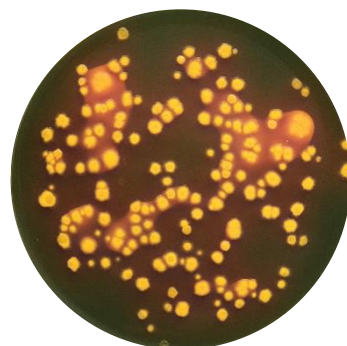
• MICROBIAL CULTURE IMAGES



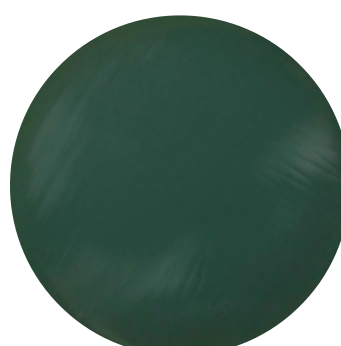
S.typhimurium ATCC 14028
(50-100CFU)



S.flexneri ATCC 12022
(50-100CFU)



E.coli ATCC 25922
(≥10³CFU)



E. faecalis ATCC 29212
(≥10³CFU)

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