



Hektoen Enteric Agar | AS-1248

Used for isolation and cultivation of gram-negative enteric microorganisms, especially *Shigella*, from clinical and nonclinical specimens.

Salmonella and *Shigella* species can be isolated using Hektoen Enteric (HE) agar, a selective and differential medium. For nutritional support, it contains yeast extract and peptone; for carbohydrates, lactose, sucrose, and salicin are used. Bile salts distinguish lactose fermenters from Gram-positive bacteria, as do acid fuchsin and bromothymol blue markers. Hydrogen sulfide generation is detected using ferric ammonium citrate and sodium thiosulfate. Addition of novobiocin may improve selectivity. Enteric pathogens are isolated and differentiated from clinical and dietary samples using hektoen enteric agar.

Composition (gr/L)

Proteose Peptone	15
Yeast Extract	3
Bile Salt No.3	2
Lactose	14
Sucrose	14
Salicin	2
Sodium Chloride	5
Sodium Thiosulfate	5
Ferric Ammonium Citrate	1.5
Bromothymol Blue	0.05
Acid Fuchsin	0.08
Agar	13.5
Final pH at 25°C	7.7 ± 0.2

Preparation

Dissolve 75 g of the powder into 1 liter distilled water. Mix well. Heat to boiling with agitation to complete dissolving. DO NOT OVERHEAT AND AUTOCLAVE THE MEDIUM.

Quality Control

Dehydrated Appearance: Light beige, may have a slight green cast, free flowing, homogeneous.

Prepared Appearance: Green with yellowish cast, slightly opalescent.

Reaction of 7.5% Solution at 25°C: pH 7.7 ± 0.2

Microbial Test Results

Incubate at 35±2 °C for 18 to 24 hours.

Organism (ATCC)	Recovery	Colony Color
<i>Escherichia coli</i> (25922)	Partial inhibition	Salmon-orange may have bile precipitate
<i>Enterococcus faecalis</i> (29212)	Marked to complete inhibition	-
<i>Salmonella enterica</i> subsp. <i>enterica</i> serotype <i>Typhimurium</i> (14028)	Good	Greenish Blue, W/Black centers
<i>Shigella flexneri</i> (12022)	Good	Greenish Blue

Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.