Technical Data Sheet



Hektoen Enteric Agar

Product No.	Product Category	Specification
HCM016	Dehydrated Culture Medium	500g/bottle

Intended Use

For differential and selective isolation of Salmonella and Shigella species.

Principle and Interpretation

Bile salts, bromthymol blue and acid fuchsin inhibit the growth of most Gram positive organisms. Lactose, salicin and sucrose, serves as fermentable source of carbohydrates to encourage the growth and differentiation of enteric bacteria. Proteose peptone provides nitrogen, carbon, and amino acids required for organism growth. Yeast Extract is a vitamin source. Sodium chloride maintains the osmotic balance of the medium. Sodium thiosulfate provides a source of sulfur. Hektoen Enteric Agar can also detect the production of hydrogen sulfide gas, which turns parts of the medium black. Ferric ammonium citrate serves as iron source, which cause production of hydrogen sulfide from sodium thiosulphate and also aids in the visualization of hydrogen sulfide production by reacting with hydrogen sulfide gas to form a black precipitate.

Formulation

Ingredients	/liter	
Peptone	12.0g	
Yeast extract	3.0g	
Lactose	12.0g	
Sucrose	12.0g	
Salicin	2.0g	
Bile salts No.3	9.0g	
Sodium chloride	5.0g	
Sodium thiosulfate	5.0g	
Ferric ammonium citrate	1.5g	
Acid fuchsin	0.1g	
Bromothymol blue	0.065g	
Agar	14.0g	
pH7.5±0.2 at 25°C		

Preparation

Suspend 75.6 g in 1 L of distilled or deionized water. Heat with frequent agitation and boil to completely dissolve

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the powder. Do not autoclave. Cool to 50°C and pour into sterile petri dishes.

Quality Control

Cultural characteristics observed after incubation at 35-37°C for 24 hours.

Quality control strains	Growth	Characteristics
Salmonella typhimurium ATCC14028	Good, PR≥0.5	Blue-green colony with black center
Plesiomonas shigelloides CMCC(B)51572	Good, PR≥0.7	Blue-green
Escherichia coli ATCC8739	Inhibited, G < 5	-
Staphylococcus aureus ATCC6538	Inhibited, G≤1	-

Storage and Shelf Life

2-30°C, Keep container tightly closed, avoid direct sunlight.

Use before expiry date on the label.

Precautions

- 1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort
- 2. Keep container tightly closed after using to prevent clumping.

Waste Disposal

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

Revision

On June 14, 2024

References

FDA BAM Media M61