Hektoen Enteric Agar Catalog : HB4093-4-5K

Hektoen Enteric Agar is used for isolation and differentiation of enteric pathogens such as Salmonella,Shigella and other enterobacteria.

Approximate Formula:

Ingredients	gm/liter
Peptic Digest of Animal Tissue	12.0
Yeast extract	3.0
Bile Salts No.3	9.0
Lactose	12.0
Sucrose	12.0
Salicin	2.0
Sodium chloride	5.0
Bromothymol blue	0.065
Sodium thiosulfate	5.0
Ferric ammonium citrate	1.5
Acid fuchsin	0.1
Agar	14.0

Final pH7.5±0.2 at 25℃

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 75.6g of the medium in one liter of distilled water or deionized water.Mix well and heat with frequent agitation to completely dissolve the powder.When cooling to 50℃,pour into sterile petri dishes.Use within 24 hours. DO NOT AUTOCLAVE.

Principle and Interpretation:

Peptic digest of animal tissue and yeast extract provide nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic equilibrium of the medium. Bile salts No.3 can inhibit gram-positive bacteria. This medium contains three carbohydrates, lactose, sucrose and salicin, for optimal differentiation of enteric pathogens by the color of the colonies and of the medium adjacent to the colonies. The lactose concentration is higher than in many other media used for enterics in order to aid in the visualization of enteric pathogens and minimize the problem of delayed lactose fermentation. Ferric ammonium citrate and sodium thiosulfate in the medium enable the detection of hydrogen sulfide production, thereby aiding in the differentiation process due to the production of blackcentered colonies. The indicator system, consisting of acid fuchsin and bromthymol blue, has a lower toxicity than that of many other enteric media, resulting in improved recovery of enteric pathogens. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing yellowish-green powder. The prepared medium is a kind of green transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is caking or color variation cannot be used.

Storage conditions and Shelf life:

Hektoen Enteric Agar must be stored tightly capped in the original container at 5-30°C.The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8°C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1℃ for 18-24hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Recovery	Remarks
Salmonella enteritidis	CMCC 50760	20-200	Luxuriant	≥50%	Black colonies

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Shigella flexneri	ATCC 12022	20-200	Luxuriant	≥50%	Colorless colonies, no black center
Salmonella typhimurium	ATCC 14028	20-200	Luxuriant	≥50%	Black colonies
Escherichia coli	ATCC 25922	＞10^3	Partial inhibited	/	Yellow colonies
Enterococcus faecalis	ATCC 29212	＞10^3	Inhibited	/	/

Reference:

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