BAC*Gro*™ Culture Media

GOLD STANDARD DIAGNOSTICS

Hektoen Enteric Agar - Instructions for Use

Intended Use

BAC*Gro*™ Hektoen Enteric Agar (HE) is a selective and differential medium used in the isolation and differentiation of Gram-negative enteric pathogens.

Product Summary

Hektoen Enteric agar utilizes bile salts to inhibit Gram-positive organisms and some Gram-negative strains. Optimized differentiation is achieved through the addition of three carbohydrates: lactose, sucrose, and salicin. Ferric ammonium citrate and sodium thiosulfate allow for the detection of hydrogen sulfate production, aiding in differentiation by causing black-centered colonies for Salmonella. Acid fuchsin and Bromothymol blue is an indicator system with a lower toxicity to promote improved enteric pathogen recovery.

Formulation (per Liter)*

Animal Peptone	12.0 g
Yeast Extract	3.0 g
Bile Salts	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	0.064 g
Acid Fuchsin	0.1 g
Agar	13.5 g
Total	75.2 g/L

*Formula may be supplemented and/or adjusted as required to meet performance criteria

Directions

1. Add 75g of HE powder to 1 L of deionized water.
2. Stir while heating. Bring to a brief boil to dissolve completely.
3. **DO NOT AUTOCLAVE**.
4. Pour plates and allow to solidify.

Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BAC*Gro*™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Green-beige, free-flowing, homogenous. May contain dark particles.

Appearance (prepared): Green-blue, slightly opalescent.

pH (prepared): 7.3 – 7.7 at 25°C[1,2]

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	
Salmonella Typhimurium (ATCC® 14028)	≤100 CFU	18 - 24 hr.	35° C	Aerobic	Blue – blue-green CFU w. Black Centers
Shigella flexneri (ATCC® 12022)	≤100 CFU	18 - 24 hr.	35° C	Aerobic	Green – green-blue CFU.

Escherichia coli (ATCC® 25922)	>10^4 CFU	18 - 24 hr.	35° C	Aerobic	Partial/complete inhibition. Salmon CFU.
E. faecalis (ATCC® 29212)	>10^4 CFU	18 - 24 hr.	35° C	Aerobic	Partial/complete inhibition. Yellow CFU.

Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some species or strains may be encountered that grow poorly in this medium.

Further biochemical or serological testing is required for the identification of organisms grown in this medium.

Storage and Expiration

BAC*Gro*™ HE should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

Catalog Numbers

DCM4901 – Hektoen Enteric Agar, 500g
DCM4910 – Hektoen Enteric Agar, 10kg

[1] Hektoen Enteric Agar Protocol, American Society for Microbiology.
[2] BAM Media M61: Hektoen Enteric (HE) Agar, Bacteriological Analytical Manual.

Revision History:

Revision	Description	Effective Date
03	Updated pH specification from 7.4 to 7.8 to 7.3 to 7.7	08/01/2024
02	Increased the inhibitory inoculum from 1,000 CFU to 10^4 CFU to align with industry standards. Added in packaging part number DCM4910	23-FEB-2024
01	Document creation	13-APR-2021