Reference: BPWR3031 **A.B.E. - Technical Data Sheet**

Product: # Hektoen enteric Agar

Specification

Solid, selective and differential culture medium for isolation of pathogenic enterobacteria from contaminated samples according to ISO 21567 standard.

Presentation

	Packaging Details	Shelf Life	Storage
20 Prepared Plates 90 mm with: 21 ± 2 ml	1 box with 2 packs of 10 plates/pack. Single cellophane.	3 months	2-14 ºC

Composition

Composition (g/l):

Peptone	15.00
Yeast extract	3.00
Bile salts	2.00
Lactose	14.00
Sucrose	14.00
Salicin	2.00
Sodium chloride	5.00
Sodium thiosulfate	5.00
Ammonium ferric citrate	1.50
Acid fuchsin	0.08
Bromthymol blue	0.05
Agar	13.50

Description /Technique

Description:
This culture medium, originally developed by King and Metzger, has a high nutrient content, peptones, fermentable sugars and combination of indicators. All these characteristics and the bile salts make it a very selective and effective medium.

Technique:
In order to avoid the spreading of Proteus, it is necessary that the agar surface be perfectly dry at the moment of inoculation. Inoculation must be carried out by surface streaking, directly from rectal swabs or faeces. If colonies are well separated after 18-24 hours of incubation, the first characteristic appearances or colony morphology may be observed:
- *Shigella spp.,* Proteus inconstans: Raised colonies, green colour.
- *Salmonella spp.*: Green-blue colonies, with or without black centre.
- *Pseudomonas spp.*: Irregular colonies, plain, green or brown.
- Companion and non pathogenic bacteria: Salmon coloured colonies.

Note: Salmonella negative variants of H2S grown in Hektoen are blue-green colonies without black centers and must undergo complementary identification tests.

Each laboratory must evaluate the results according to their specifications.

Presumptive isolation of Shigellae and Salmonellae must be confirmed by further microbiological and biochemical tests.

Precautions
For in vitro diagnostic use. Do not reuse. For professional use only.
Do not use the product if it shows evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

Quality control

Physical/Chemical control

Color : Green pH: 7.5 ± 0.2 at 25ºC

Microbiological control

Spiral Spreading: Practical range 100 ± 20 CFU. min. 50 CFU (productivity) / 10^4-10^6 CFU (selectivity).

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 37 ºC ± 1, reading after 20 - 24 h

Microorganism	Growth
Salmonella enterica ATCC® 13076, WDCM 00030	Good. Black colonies, Greenish-Blue medium.
Shigella flexneri ATCC® 12022, WDCM 00126	Good. Green to blue colonies
Enterococcus faecalis ATCC® 29212, WDCM 00087	Inhibited
Escherichia coli ATCC® 25922, WDCM 00013	Inhibited to poor. Salmon to red colonies
Proteus mirabilis ATCC® 43071	Good. Black colonies, Greenish-Blue medium.
Salmonella typhimurium ATCC® 14028, WDCM 00031	Good. Black colonies, Greenish-Blue medium.

Sterility control

Incubation 48 h at 30-35 ºC and 48 h at 20-25 ºC: NO GROWTH.
Check at 7 days after incubation in same conditions.

Bibliography

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