

Specification

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

Presentation

20 Prepared Plates
90 mm
with: 21 ± 2 ml

Packaging Details

1 box with 2 packs of 10 plates/pack. Single cellophane.

Shelf Life

3 months

Storage

2-14°C

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 /TechniqueDescription:

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.

Quality control**Physical/Chemical control**

Color : Green

pH: 7.5 ± 0.2 at 25°C**Microbiological control**Spiral Spreading: Practical range 100 ± 20 CFU; Min. 50 CFU (Productivity) / 10^4 - 10^6 CFU (Selectivity).Aerobiosis. Incubation at $37 \pm 1^\circ\text{C}$, reading after 24 ± 3 h**Microorganism***Salmonella enterica* ATCC® 13076, WDCM 00030*Shigella flexneri* ATCC® 12022, WDCM 00126*Enterococcus faecalis* ATCC® 29212, WDCM 00087*Escherichia coli* ATCC® 25922, WDCM 00013**Growth**Good (≥ 50 %)Good (≥ 50 %)

Inhibited

Inhibited

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

Bibliography

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