

Specification

Cystine, lactose, electrolyte deficient medium, recommended for the isolation and identification of urinary pathogenic bacteria.

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.....	4.000
Trypsic peptone.....	4.000
Meat extract.....	3.000
L-Cystine.....	0.128
Lactose.....	10.000
Bromothymol blue.....	0.030
Agar.....	15.000

Description /Technique

Description:

This general purpose medium has been recommended for bacteriological urine analysis. Current formulation is a modification of the original one reported by Sandys, that achieves an excellent colony differentiation without inhibitors. This fact, and also the careful selection of nutritive components, makes this medium a substrate able to support growth of most urinary pathogenic bacteria. Presence of lactose as a fermentable sugar allows classic differentiation and, at the same time, lack of electrolytes suppresses swarming waves on the members of the *Proteus* species and sometimes growth of *Shigella spp.* also.

Technique:

Collect, dilute and prepare urine samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Spread the plates by streaking methodology or by spiral method. Incubate the plates right side up aerobically at 37±1C for 18-24h. (Incubation times longer than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,... This medium can be inoculated streaked directly with a calibrated loop to give quantitative results).

After incubation, enumerate all the colonies that have appeared onto the surface of the agar.

Each laboratory must evaluate the results according to their specifications.

Presumptive isolation of any urinary pathogen must be confirmed by further microbiological and biochemical tests.

Each laboratory must establish and evaluate the results according to their specifications, considering the volume of sample or the microorganism.

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Quality control

Physical/Chemical control

Color : Green

pH: 7.4 ± 0.2 at 25°C

Microbiological control

Inoculate: Practical range 100±20 CFU; Min. 50 CFU (Productivity).

Aerobiosis. Incubation at 37 ± 1°C, reading after 24 ± 3 h

Microorganism

Proteus mirabilis ATCC® 43071*Escherichia coli* ATCC® 25922, WDCM 00013*Proteus mirabilis* ATCC® 12453*Stph. aureus* ATCC® 25923, WDCM 00034*Proteus mirabilis* ATCC® 29906, WDCM 00023*Salmonella typhimurium* ATCC® 14028, WDCM 00031

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

Growth

Good - blue colonies without swarming waves

Good - opaque yellowish colonies

Good - blue colonies without swarming waves

Good - opaque yellowish colonies

Good-Blue colonies w. moderate swarming waves

Good - blue colonies without swarming waves

Bibliography

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