

Specification

Liquid medium for determination of urease and indole test.

Presentation

	Packaging Details	Shelf Life	Storage
20 Tubes Tube 16 x 113 mm with: 2 ± 0.1 ml	16x113 mm glass tubes, ink labelled, metal-Non injectable cap. 20 tubes per box .	12 months	8-14 °C

Composition

Composición (g/l):

Peptone.....	1.000
D(+) Glucose.....	1.000
Sodium chloride.....	5.000
Potassium dihydrogen phosphate.....	0.800
Dipotassium hydrogen phosphate....	1.200
Phenol red.....	0.012
Tryptophan.....	1.000
Urea.....	20.000

Description /Technique

Inoculate with a swab or a loop with the isolated colonie using one tube per isolate.

Incubate 21± 3 h. at 37 ± 1° C before reading.

Microorganisms urease positive, turn medium from clear yellowish to clear pink due to pH indicator Phenol red change because of the production of alkaline metabolites.

The addition of Kovaks reagent to show indole production due to Tryptophane hydrolysis, must be done only after having read the urease reaction. Formation of a red ring indicates indol presence.

E.coli ATCC 25922 Urease (-) Indole (+)

P.mirabilis ATCC 14253 Urease + (6 hours) indole (-)

P.hauseri ATCC 13315 Urease (+) indole (+)

Quality control

Physical/Chemical control

Color : Yellow- orangey pH: 6.8 ± 0.2 at 25°C

Microbiological control

Inoculate with loop/swab with pure isolates to get a thick suspension

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

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

Microorganism

Escherichia coli ATCC® 25922, WDCM 00013

Proteus hauseri ATCC® 13315

Proteus mirabilis ATCC® 43071

Salmonella typhimurium ATCC® 14028, WDCM 00031

Enterobacter aerogenes ATCC® 13048, WDCM 00175

Growth

Good - Negative urease - Positive indol

Good - Positive urease- Indol positive

Good - Positive urease - Negative indol

Good - Negative urease - negative indol

Good - Negative urease - negative indol

Sterility Control

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

Check at 7 days after incubation in same conditions.

Bibliography

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