Color Urin



Chromogenic and selective medium used for the differentiation and identification of microorganisms that cause urinary tract infection.

CONTENTS (Liter)

| Peptone | 15.0 g |
|-----------------|--------|
| Yeast Extract | 8.0 g |
| Chromogenic Mix | 5.27 g |
| Agar | 15.0 g |

Final pH = 7.0 ± 0.2 at 25° C.

PROCEDURE

Suspend 43.27 G of powder in 1L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense into petri dishes.

INTERPRETATION

Color Urin is a chromogenic and selective medium used for the differentiation and identification of microorganisms that cause urinary tract infection. Peptone provides the nitrogen and vitamin sources. Yeast extract provides vitamin B complex that stimulate bacterial growth. There are two kinds of chromogenic substrates in this medium, X-glu and red-gal. X-glu is cleaved by the enzyme β -glucosidase produced by Enterococcus spp and causes colonies with blue coloring. Red-gal is cleaved by β -galactosidase produced by Escherichia coli. As this, colonies form pink. Both chromogenics occur purple colonis in coliforms. The medium also contains phenylalanine and tryptophan which act as indicators of tryptophan deaminase activity of Proteus spp, Morganella spp and Providencia spp. Agar is the solidifying agent.

TECHNIC

Inoculate the plates with spreading the specimen on surface of medium using a sterile loop. Incubate at 36 \pm 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige Prepared medium

Appearance: clear to slightly opalescent

Color: light amber

Incubation conditions: $36 \pm 1^{\circ}$ C / 18 - 24 hours

| Microorganism | ATCC | Inoculum CFU | Growth | Characteristics |
|------------------------|-------|--------------|--------|-------------------------------|
| Escherichia coli | 25922 | 50-100 | good | pinkish-purple colony |
| Enterobacter aerogenes | 13048 | 50-100 | good | blue colony |
| Proteus vulgaris | 6059 | 50-100 | good | bluish colony with brown halo |
| Enterococcus faecalis | 29212 | 50-100 | good | light blue colony |
| Staphylococcus aureus | 25923 | 50-100 | good | cream colony |

STORE

The powder is very hygroscopic. Store the powder at 2-8°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

REFERENCES

- 1. J. Merlino, S. Siarakas, G.J. Robertson, G.R. Funnel, T. Gottlieb, and R. Bradbury. Evaluation of Colorex Orientation for differentiation and presumptive identification of Gram-negative bacilli and Enterococcus species. J. Clin. Microbiol. 1996, 34: 1788-1793.
- 2. Z. Samra, et al. Evaluation of use of a new chromogenic Agar in detection of urinary tract pathogens. J. Clin. Microbiol. 1998, 36: 990-994.

PACKAGE

| Cat. No : MB-C1621 Color Urin | 500 G |
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