

Color Detection



Chromogenic and selective medium used for the detection and identification of microorganisms from clinical specimens and foods.

• CONTENTS (Liter)

Peptone	15.0 g
Yeast Extract	8.0 g
Sodium Chloride	5.0 g
Chromogenic Mix	15.12 g
Agar	15.0 g
Final pH = 7.2 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 58.12 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 Detection is a chromogenic and selective medium used for the detection and identification of microorganisms from clinical specimens and foods. Peptone provides the nitrogen and vitamin sources. Yeast extract provides vitamin B complex that stimulate bacterial growth. Sodium chloride maintains the osmotic balance. 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 ± 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 ± 1°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	pinkish-purple colony
<i>Klebsiella pneumoniae</i>	27736	50-100	good	greenish-dark blue colony
<i>Proteus mirabilis</i>	25933	50-100	good	colorless colony
<i>Proteus vulgaris</i>	6059	50-100	good	bluish colony with brown halo
<i>Enterococcus faecalis</i>	29212	50-100	good	light blue colony
<i>Staphylococcus aureus</i>	25923	50-100	good	cream colony
<i>Pseudomonas aeruginosa</i>	27853	50-100	good	golden yellow 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-C1611 Color Detection	500 G
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