CHROMOGENIC COLIFORM AGAR

Ready to use in flasks chromogenic medium for the simultaneous detection of coliforms and *Escherichia coli*.



Chromogenic Coliform Agar: *E.coli* (blue colonies) and *E.aerogenes* (salmon colonies)

TYPICAL FORMULA (g/l)

Tryptose	10.00
Tryptophan	0.10
Peptocomplex	5.00
Yeast Extract	3.00
Sodium Chloride	5.00
Bile Salts n.3	1.50
IPTG	0.10
X-GLUC	0.06
Salmon GAL	0.15
Agar	13.00

DIRECTIONS

Dissolve the contents of the bottle by boiling in a temperature controlled water bath. Cool to 50° C and distribute into sterile Petri dishes. Final pH 7.0 ± 0.2

Final pri $7.0 \pm 0.$

DESCRIPTION

Chromogenic Coliform Agar is a selective and differential medium for the simultaneous detection of *E. coli* and coliform bacteria in waters and foods.

The medium is made selective by the presence of bile salts; the differentiation between coliforms and *E. coli* is given by the presence of Salmon-GAL, a chromogenic substrate for the detection of β -galactosidase and X-GLUC, a chromogen substrate for the detection of β -glucuronidase.

Salmon-GAL is hydrolysed by coliforms releasing a salmon colour pigment; this reaction is strengthened in the medium by the presence of IPTG (isopropil- β -D-thiogalactopiranoside).

X-GLUC is hydrolysed, among enterobacteria, by *E. coli*, and by a few other strains of *Salmonella* and *Shigella* releasing a blue pigment.

The presence of tryptophan in the medium allows testing the indole directly onto the colonies by adding Kovac's Reagent, for the confirmation of *E. coli*.

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TECHNIQUE

Carry out the simultaneous detection of coliform bacteria and *E. coli*, following the usual methods with surface streaking, poured plates or MF techniques and with incubation at 37°C for 18-24 hours: The colonies appearance is the following:

Escherichia coli: dark blue colonies, indole positive

Coliforms (other than *E. coli*); salmon coloured colonies

Proteus: colonies with bright brown halo

Other Enterobacteriaceae: colourless colonies

Gram-positive bacteria are usually inhibited.

The Indole test is carried out by adding about 1ml of Kovac's Reagent to the colonies and observing the formation of a red colour within 1-2 minutes.

If the faecal coliforms detection is required, incubate the inoculated plates at 44°C for 18-24 hours.

STORAGE

Store at 2-8° - When stored as directed the plates remain stable until the expiry date shown on the label. Do not use beyond stated expiry date.

PACKAGING 5112992

Chromogenic Coliform Agar

6 x 100 ml ready to use flasks