

# CHROMAGAR ECC

## INSTRUCTION FOR USE READY-TO-USE PLATED MEDIA

For professional use

**Intended use:** CHROMagar ECC is used for the detection and enumeration of  $\beta$ -glucuronidase positive *E.coli* and coliforms in food and water samples.

Ref .	Type of medium:	Packaging:
1401; 201401	ready-to-use medium-plate	1x10 pcs (90 mm)

**1. Principle:** peptones and yeast extract are the nitrogen and vitamin sources in CHROMagar ECC. Chromogenic mix permits detection and differentiation of the  $\beta$ -glucuronidase positive *E.coli* and coliforms. Sodium chloride maintains the osmotic balance of the medium. Agar is the solidifying agent.

### 2. Formula/Liter:

Chromogenic mix	4.8 g
Peptone and yeast extract	8.0 g
Sodium chloride	5.0 g
Agar	15.0 g

**3. pH:**  $7.2 \pm 0.2$  at 25°C.

### 4. Appearance:

**Prepared Appearance:** prepared medium is clear and light straw.

**5. Sample:** food and water samples.

**6. Test procedure:** if the agar plate has been refrigerated, allow to warm to room temperature before inoculation. CHROMagar ECC is used in a variety of procedures. Generally incubate plates aerobically at  $35 \pm 2^\circ\text{C}$  for 24 hours in an inverted position. If research is focused on faecal coliform bacteria incubate plates at  $44^\circ\text{C}$  for 24h. If research is targeted to maximise total coliform detection incubate plates at  $30^\circ\text{C}$  for 24h.

**7. Results:** after incubation time observe growth and colour of characteristic microorganisms. Identification of the microorganisms should be confirmed by biochemical test.

**8. Quality control:** perform quality control testing for both negative and positive reaction by inoculating a representative sample of plates with pure cultures of stable control organisms that produce known, desired reactions. Graso uses following strains for performing quality control. Please note that other strains can be used in accordance with applicable local, state and laboratory's standard Quality Control.

Microorganism:	Growth:	Appearance of colony:
<i>Escherichia coli</i> ATCC 25922	good growth	blue
<i>Enterobacter aerogenes</i> ATCC 13048	good growth	mauve
<i>Staphylococcus aureus</i> ATCC 25923	no growth	—

**9. Precautions:** sensitivity for *E.coli* is 97% (Ogden et al. 1991). Rare  $\beta$ -glucuronidase negative *E.coli* strains are false negative on this medium (typically O157 *E.coli*). If research is focused on rare pathogenic strains such as O157 *E.coli* : please refer to CHROMagar O157 product. If your research is focused on total coliform, few *Hafnia* are false negative and have a colourless appearance.

**10. Disposal of waste:** after use, all plates and any other contaminated materials must be sterilized or disposed of in line with appropriate internal procedures and in accordance with local legislations. Plates can be destroyed by autoclaving at  $121^\circ\text{C}$  for at least 20 minutes.

**11. Storage:** On receipt, store plates at  $2-12^\circ\text{C}$  away from direct sun light in an inverted position. Do not overload a refrigerator with excessive amounts of plates to avoid water condensation on the lids during storage. Plates must not come into direct contact with the inner walls of refrigerator, as the media may freeze, invalidating the tests. Prepared

plates, stored in their original sleeve wrapping at 2-12°C until just prior to use, may be inoculated up to the expiration date and incubated for recommended incubation times. Plates from opened stacks of 10 plates should be used for two weeks when stored in a clean area at 2 to 12°C. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or others signs of deterioration. Allow the medium to warm to the room temperature before inoculation.

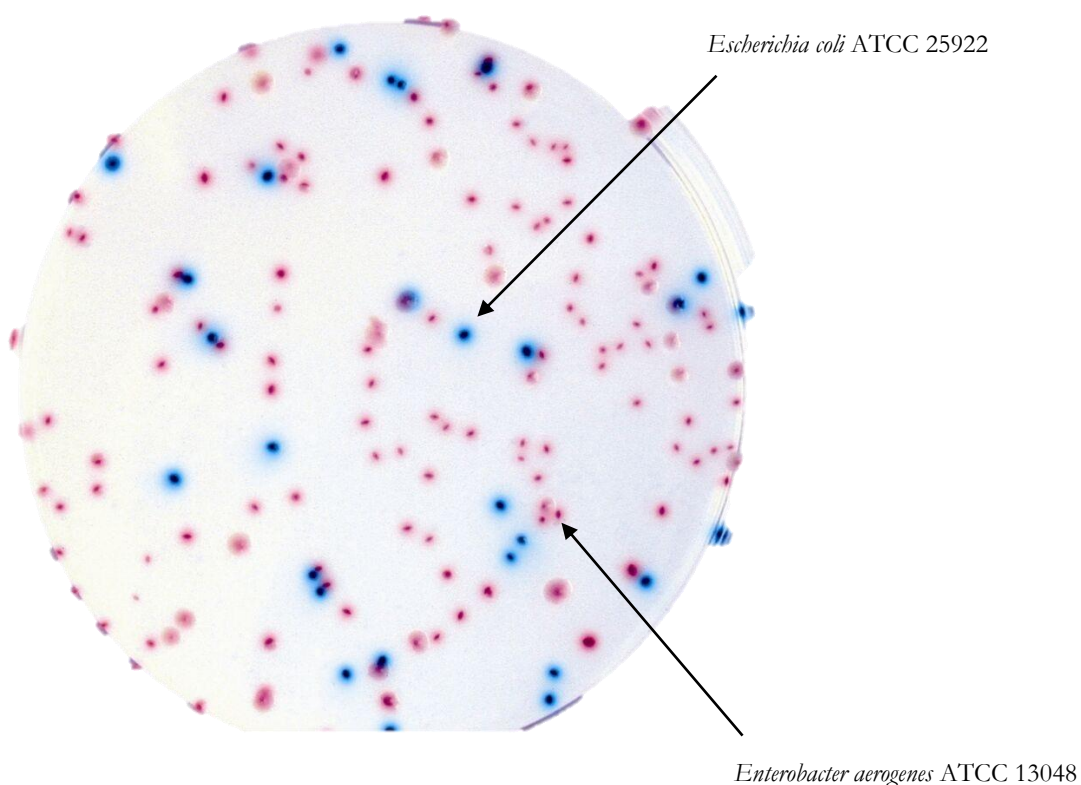
All microbiological media containing dyes or light-sensitive components should be protected from light and stored in the dark.

Note that shelf life of the growth media changes after the addition of supplements. Complete media containing protein supplement tend to degrade faster than basal media alone.

**12. Shelf life:** 3 months.

**13. Required supplements not supplied together with medium base:** not applicable.

**14. References:** available on request.



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