

Chromogenic Coliform Agar

Cat No: **111009**

Intended Use

Chromogenic Coliform Agar is a selective and differential culture medium intended for the detection, enumeration, and differentiation of coliform bacteria and *Escherichia coli* in water, food, and environmental samples. It is commonly used in microbiological quality control and public health testing to assess fecal contamination. This medium supports rapid and straightforward screening in compliance with regulatory standards such as ISO 9308-1.

Principle

The medium contains chromogenic substrates that target specific bacterial enzymes such as β -galactosidase and β -glucuronidase, enabling clear visual differentiation: coliforms typically form pink/red colonies, while *E. coli* produces blue or purple colonies. The selective agents inhibit the growth of non-target organisms, ensuring reliable detection of indicator bacteria. The combination of ingredients in the medium—such as peptone, sorbitol, and pyruvate—promotes rapid colony growth of coliforms, including pathogenic strains, and also supports the recovery of heat-injured coliforms. Sodium chloride helps maintain osmotic balance, while phosphate salts function as a buffering system. Bacteriological agar serves as the solidifying agent. The presence of tryptophan in the medium enables the Indole test to be performed for further confirmation of *E. coli*.

Storage

Recommended storage conditions: 2 to 8°C. Store in cool dry place
 Recommended shipping conditions: 2 to 8°C.

Production Standard

The formulation is prepared according to the recommendations of the current European, United States, and China Pharmacopoeia.

Precautions

1. The product may secrete water when exposed to temperature changes between low and room temperature, which is normal. Allow it to reach room temperature before use and, if possible, pre-dry it in a sterile drying oven.
2. Handle the plates with sterile gloves to prevent contamination during use.
3. Store the plates in a cool, dry place away from direct sunlight to maintain their integrity.
4. Avoid opening the plates until they are ready to be used in the sampling area to prevent airborne contamination.
5. Ensure the plates are used within their expiration date to guarantee accurate results.
6. Dispose of used plates according to biohazard waste protocols to prevent contamination and ensure safety.

Quality Control

The following were incubated at 36±1°C for 18-24 hours. The results are as follows:

Test Strains	Growth Results	Colony Characteristics
<i>Escherichia coli</i> ATCC 8739	Good	Blue-violet colonies
<i>Escherichia coli</i> ATCC 25922	Good	Blue-violet colonies
<i>Citrobacter freundii</i> ATCC 43864	Good	Pinkish-orange colonies

Product Content

Product Content	Cat No.	Size
Chromogenic Coliform Agar	111009	10 plates/bag; 200 plates/case

Composition

Peptone	3.0 g
Sodium chloride	5.0 g
Sodium pyruvate	1.0 g
Sorbitol	1.0 g
Tryptophan	1.0 g
Surface-active agent	0.1 g
Phosphate-buffered saline	4.9 g
Chromogenic mix	0.36 g
Bacteriological agar	10.0 g
Water	1000ml
Final pH (at 25°C)	6.8 ± 0.2

Shelf Life

Shelf life: 3 months from date of manufacture

Packaging

90mm x 10 plates per bag; 200 plates/case

Disposal

Please adhere to the respective regulations for the disposal of used culture medium (e.g., autoclave for 30 minutes at 121 °C)

Specially manufactured for:

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