



CHROME COLIFORM AGAR

Product Number **C4346**

Product Description

Chrome Coliform Agar is recommended for the simultaneous detection of *Escherichia coli* and total coliforms in water and food samples. Peptone special, and sodium pyruvate provide essential growth nutrients to the organisms. The phosphates buffer the media. Sodium lauryl sulphate inhibits gram-positive organisms.

The chromogenic mixture contains two chromogenic substrates Salmon-GAL and X-glucuronide. The enzyme β -D-galactosidase produced by coliforms cleaves Salmon-GAL, resulting in the salmon to red color of the coliform colonies.

The enzyme β -D-glucuronidase is produced by *Escherichia coli* and cleaves x-glucuronide. *Escherichia coli* forms a dark blue to violet colonies due to the cleavage of X-glucuronide and Salmon-GAL.

Components

Item	g/L
Peptone, Special	3.00
Sodium Chloride	5.00
Dipotassium Hydrogen Phosphate	3.00
Potassium Dihydrogen Phosphate	1.70
Sodium Pyruvate	1.00
Tryptophan	1.00
Sodium Lauryl Sulphate	0.10
Chromogenic Mixture	0.20
Agar	12.00

Final pH (at 25°C) 6.8 ± 0.2

Precautions and Disclaimer For laboratory use only. Not for drug, household or other uses.

Preparation Instructions

Suspend 27 grams in 1000 mls distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. If a high number of gram-positive accompanying bacteria are expected, add 5 mg/ml N1628 Novobiocin before autoclaving the medium.

Product Information

Storage

Store the dehydrated medium at 2-8°C.

Product Profile

Appearance	Beige colored, homogeneous, free flowing powder.
Color and Clarity	Colorless, clear to slightly opalescent gel forms in petri plates.
Cultural Response	Cultural characteristics observed after 24-48 hours at 35-37°C.

Organisms

<i>Escherichia coli</i>	dark blue/violet
<i>Klebsiella pneumoniae</i>	light pink
<i>Salmonella enteritidis</i>	colorless
<i>Enterobacter cloacae</i>	salmon to red
<i>Citrobacter freundii</i>	salmon to red
<i>Shigella flexneri</i>	colorless

Color

	Salmon GAL	X-Glucuronide
<i>Escherichia coli</i>	+	+
<i>Klebsiella pneumoniae</i>	+	-
<i>Salmonella enteritidis</i>	+	-
<i>Enterobacter cloacae</i>	+	-
<i>Citrobacter freundii</i>	+	-
<i>Shigella flexneri</i>	+	-

References

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2. Kilian M., et al., (1976). Acta. Pathol. Microbiol. Scand. Sect. B. 84, 245.
3. LeMinor, L., et al., (1962). Ann. Inst. Pasteur. 102, 267.
4. Manafi, M., et al., (1989). Zentralbl. Hyg. 189, 225.

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