

## BCP GLUCOSE AGAR

### ENTEROBACTERIACEAE CONFIRMATORY AGAR ISO 21528:2

**CAT Nº: 1320**

For the differentiation and enumeration of Enterobacteriaceae

#### FORMULA IN g/l

Tryptone	10.00	Yeast Extract	1.50
D-glucose	10.00	Bromocresol Purple	0.015
Sodium Chloride	5.00	Bacteriological Agar	15.00

**Final pH 7.0± 0.2 at 25°C**

#### PREPARATION

Suspend 41.5 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C, mix well and dispense into plates. The prepared medium should be stored at 8-15°C. The color is purple.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

#### USES

BCP GLUCOSE AGAR, also known as Enterobacteriaceae Confirmatory Agar ISO 21528:2, is used for the differentiation of Enterobacteriaceae in urine, water and food. It differentiates species on the basis of dextrose fermentation.

Tryptone and Yeast extract provide nitrogen, vitamins, minerals and amino acids essential for growth. D-glucose is the fermentable carbohydrate providing carbon and energy Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bromocresol purple is a pH indicator. Bacteriological agar is the solidifying agent.

Inoculate and incubate at 35 ± 2°C for 18 - 24 hours. The glucose-fermenting microorganisms produce yellow colonies (acid) and the non-fermenting ones, purple colonies.

ISO 21528:2 recommends this medium for glucose fermentation testing. Inoculate oxidase-negative colonies in tubes containing BCP Glucose Agar and incubate at 37°C for 24 ± 2 hours. A yellow color indicates a positive reaction. Colonies that are oxidase negative and glucose-positive are confirmed as Enterobacteriaceae.

#### MICROBIOLOGICAL TEST

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 35 ± 2°C and observed after 18-24 hours.

Microorganisms	Growth	Acid production (Color changes to yellow)
* <i>Escherichia coli</i> ATCC 25922	Good	+
* <i>Salmonella typhimurium</i> ATCC 14028	Good	+
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited	-

\*Inoculate and incubate at 37°C for 24 ± 2 h

## BIBLIOGRAPHY

ISO 21528:2 Microbiology of food and animal feeding stuffs- Horizontal methods for the detection and enumeration of Enterobacteriaceae Part 2: Colony-count method

Drigalsky, C. (1902) Über ein Verfahren zum Nachweis der typhusbacillen.



## STORAGE

Once opened keep powdered medium closed to avoid hydration.

