

16447 Glucose Bromcresol Purple Agar (Tryptone Yeast Extract Agar with Bromocresol Purple)

Glucose Bromcresol Purple Agar is used for isolation and enumeration of Enterobacteriaceae and *Bacillus cereus*.

Composition:

Ingredients	Grams/Litre
Casein enzymic hydrolysate	10.0
Yeast extract	1.5
Sodium chloride	5.0
Glucose	10.0
Bromo cresol purple	0.015
Agar	15.0
Final pH 7.0 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Light yellow coloured, homogeneous, free flowing powder.

Colour and Clarity: Purple colourled, clear to slightly opalescent gel forms in petri plates.

Directions:

Suspend 41.52 g in 1000 ml distilled water. Heat to boiling with gentle swirling to dissolve the agar completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Avoid overheating. Cool to 45-50°C and pour into sterile petri plates.

Principle and Interpretation:

Glucose Bromcresol Purple Agar is formulated according to ISO Committee under the specification ISO 7402:1993 and ISO 8523:1991. It is described for the enumeration of Enterobacteriaceae and *Bacillus cereus*.

Casein enzymic hydrolysate and yeast extract provide essential growth nutrients like amino acids, other nitrogenous compounds and vitamin B complex. D-Glucose is the fermentable carbohydrate and bromo cresol purple act as the pH indicators with color change from purple to yellow. A colour change indicates fermentation activities. Sodium chloride maintains the osmotic balance and the agar is the solidifying agents.

Cultural characteristics after 18-24 hours at 35°C

Organisms (ATCC)	Growth
<i>Bacillus cereus</i> (11778)	+++
<i>Enterobacter aerogenes</i> (13048)	+++
<i>Klebsiella pneumoniae</i> (23357)	+++
<i>Escherichia coli</i> (25922)	+++
<i>Salmonella</i> serotype <i>typhi</i> (6539)	+++



References:

1. R.M. Atlas, L.C. Parks, *Handbook of Microbiological Media*, CRC Press, Boca Raton, Fla (1993)
2. International Organization for Standardization (ISO), *Microbiology - General guidance for the detection of Enterobacteriaceae with pre-enrichment*, Draft ISO 8523 (1991)
3. International Organization for Standardization (ISO), *Microbiology - General guidance for the enumeration of Enterobacteriaceae without resuscitation - MPN technique and colony-count technique*, Draft ISO 7402 (1993)
4. *Microbiology of food and animal feeding stuffs -- Horizontal methods for the detection and enumeration of Enterobacteriaceae -- Part 2: Colony-count method*, ISO 21528-2:2004.
5. *Microbiology of food and animal feeding stuffs -- Horizontal methods for the detection and enumeration of Enterobacteriaceae -- Part 1: Detection and enumeration by MPN technique with pre-enrichment*, ISO 21528-1:2004

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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