

TM 2016 – BROMO CRESOL PURPLE AGAR W/LACTOSE

INTENDED USE

For the isolation of coliforms.

PRODUCT SUMMARY AND EXPLANATION

Enteropathogens are well known to be transmitted via contaminated food or water. They are often implicated in major foodborne outbreaks worldwide. The common implications are gastroenteritis, vomiting, diarrhea, nausea, malaise, fever in humans. Enterotoxins produced by members of *Enterobacteriaceae* are important in the pathogenesis. *Salmonella* causes enteric fevers and food poisoning in humans. The most frequent sources of *Salmonella* food poisoning are poultry, meat, milk and milk products. Even salads and uncooked vegetables may cause infection if contaminated. Similarly *Vibrio* can enter the human host through contaminated foods or water, causing intestinal infections and Cholera.

COMPOSITION

Ingredients	Gms / Ltr
Lactose	10.000
Peptone mixture	5.000
Beef Extract	3.000
Bromocresol purple	0.025
Agar	10.000

PRINCIPLE

The medium contains Bromo Cresol Purple Agar w/Lactose is a non-inhibitory medium used for detection and isolation of coliforms and in differential study based on lactose fermentation. All coliforms ferment lactose with acid and gas production. The lactose fermenting organism changes the colour of the medium from purple to yellow. Peptone mixture and HM peptone B provide carbon, nitrogen compounds, vitamins, amino acids. Lactose acts as a source of carbohydrate, while Bromocresol purple is a pH indicator.

INSTRUCTION FOR USE

- Dissolve 28.03 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to greenish yellow homogeneous free flowing powder.
Appearance of prepared medium	: Light purple coloured, clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 6.8±0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum	Growth	Colour of the colony	Recovery	Incubation Temperature	Incubation Period



<i>Escherichia coli</i>	25922	50-100	Good-luxuriant	Yellow	>=70%	35-37°C	24-48 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Good-luxuriant	Yellow	>=70%	35-37°C	24-48 Hours
<i>Klebsiella aerogenes</i>	13048	50-100	Good-luxuriant	Yellow	>=70%	35-37°C	24-48 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Good-luxuriant	Colourless	>=70%	35-37°C	24-48 Hours
<i>Shigella flexneri</i>	12022	50-100	Good-luxuriant	Colourless	>=70%	35-37°C	24-48 Hours
<i>Proteus vulgaris</i>	13315	50-100	Good-luxuriant	Colourless	>=70%	35-37°C	24-48 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. MacFaddin, Jean F., Media for isolation-Cultivation-Identification-Maintenance of Medical Bacteria Vol1,1985 Baltimore, MD.Williams & Wilkins.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.



 GMP Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019