

## **CM 20310 – BROMO CRESOL PURPLE AGAR W/O CARBOHYDRATE (LACTOSE)**

### INTENDED USE

For detection and confirmation of coliform bacteria in water and foods.

### 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.

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.

### COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Yeast extract	1.500
Sodium chloride	5.000
Bromocresol purple	0.015
Agar	15.000

### PRINCIPLE

Peptonemixture and beef extract 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 31.51 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (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 (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good-luxuriant	>=50%	Yellow	35-37°C	24-48 Hours
Klebsiella pneumoniae	13883	50-100	Good-luxuriant	>=50%	Yellow	35-37°C	24-48 Hours
Klebsiella aerogenes	13048	50-100	Good-luxuriant	>=50%	Yellow	35-37°C	24-48 Hours
Salmonella Typhimurium	14028	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	24-48 Hours
Shigella flexneri	12022	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	24-48 Hours
Proteus vulgaris	13315	50-100	Good-luxuriant	>=50%	Colourless	35-37°C	24-48 Hours

#### PACKAGING:

Inpacksizeof100 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.







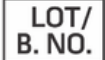


#### DISPOSAL

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

#### REFERENCES

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. 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.
5. MacFaddin, Jean F., Media for isolation-Cultivation-Identification-Maintenance of Medical Bacteria Vol1,1985 Baltimore, MD.Williams & Wilkins.
6. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.



 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. 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 LabUse Only

