

TMV 529 - MacCONKEY BROTH W/ BCP & NaCl (VEG.)

INTENDED USE

For presumptive identification of coliforms from water, milk and foods etc.

PRODUCT SUMMARY AND EXPLANATION

MacConkey Broth Purple w/ BCP & NaCl (Veg) is a modification of MacConkey Broth w/ Neutral Red (Veg). These media are prepared by using vegetable peptone in place of animal based peptones which makes the medium free of BSE/TSE risks. This broth has similar use as MacConkey Broth w/ Neutral Red (Veg) except that it contains bromo cresol purple as an indicator instead of neutral red. This liquid medium is meant for presumptive identification of coliforms from a variety of specimens such as water, milk and food.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	23.000
Lactose	10.000
Synthetic detergent No. 5	2.000
Sodium chloride	5.000
Bromocresol purple	0.010

PRINCIPLE

The medium consists of veg Peptone which provides nitrogenous and carbonaceous compounds, long chain amino acids and other essential growth nutrients. Lactose is the fermentable carbohydrate. Sodium taurocholate inhibits gram-positive organisms. Sodium chloride maintains the osmotic balance of the medium. Bromocresol purple is the pH indicator in the medium which turns yellow under acidic condition. Lactose fermentation turn the medium yellow due to the acidity produced on lactose fermentation.

INSTRUCTION FOR USE

- Dissolve 40.01 grams in 1000 ml purified/distilled water.
- Heat to dissolve the medium completely. Distribute into tubes with inverted Durham's tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool the tubes before inoculation. Incubate the inoculated media aerobically at 35 - 37°C. After 18 - 24 hours, examine agar plates and the broth tubes for growth, acid and gas production.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Yellow coloured may have slightly greenish tinge, homogeneous, free flowing powder.
Appearance of prepared medium	: Purple coloured, clear solution without any precipitate.
pH (at 25°C)	: 7.4±0.2

INTERPRETATION

Cultural characteristics observe after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid production	Gas production	Incubation Temperature	Incubation Period
<i>Klebsiella aerogenes</i>	13048	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction	35-37°C	18-24 Hours
<i>Salmonella Choleraesuis</i>	12011	50-100	Fair-good	Negative reaction	Negative reaction	35-37°C	18-24 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	$\geq 10^3$	Inhibited	-	-	35-37°C	18-24 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. Greenberg A. E., Trussell R. R. and Clesceri L. S. (Eds.), Standard Methods for the Examination of Water and Wastewater, 1985, 16th ed., A.P.H.A., Washington, D.C.
2. Rappaport F. and Henigh E., 1952, J. Clin. Path., 5:361.
3. International Organization for Standardization (ISO), 1990, Draft ISO/DIS 9308-2.
4. Harrigan W.F. and McCance M.E. (Eds.), 1976, Laboratory Methods in Food and Dairy Microbiology, Academic Press, London.
5. Holt, Harris and Teague, 1916, J. Infect. Dis., 18:596.
6. MacConkey, 1900, The Lancet, ii:20.





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

***For Lab Use Only**
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