

TM 323 - MacCONKEY BROTH W/ BCP W/O NaCl

INTENDED USE

For presumptive identification of coliforms.

PRODUCT SUMMARY AND EXPLANATION

MacConkey Broth w/BCP w/o NaCl is a differential medium recommended for presumptive identification of coliforms. MacConkey Broth, which contains bromo cresol purple as an indicator, is considered a standard medium for the primary isolation as well as the presumptive identification of the coli aerogenes group in food and water. MacConkey Broth is recommended for use in microbiological examination of foodstuffs and for direct inoculation of water samples for coliform counts. Gram-negative bacteria usually grow well on this medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as yellow. The yellow color is due to the production of acid from lactose. Shigella and Salmonella grow colorless.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.00
Lactose	10.00
Sodium taurocholate	5.00
Bromocresol purple	0.010

PRINCIPLE

MacCONKEY BROTH W/ BCP W/O NaCl is used for presumptive identification of coliforms. The medium contains Peptic digest of animal tissue provides nitrogen, carbon compounds, vitamins and amino acids. Lactose is the fermentable sugar. Sodium taurocholate is used as a selective agent.

Bromocresol purple provides a more sensitive and definite indication of acid formation. Lactose positive bacteria metabolize lactose with gas formation. The acid production is detected by the indicator. Gas generation within 48 hour or less is a presumptive evidence of the presence of coliform bacteria. If acid and gas is produced, it can be E.coli or other coliforms.

INSTRUCTION FOR USE

- Dissolve 35.0gms in 1000ml distilled water.
- Gently heat to boiling with gentle swirling and dissolve the medium completely.
- Distribute into tubes with inverted Durham's tubes and sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool the tubes to room temperature before inoculation.

QUALITY CONTROL SPECIFICATIONS.

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Purple colour, clear solution.
pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	8739	10-100	Good, Acid and gas production	>=70%	35±2°C	24-48 Hours
<i>Klebsiella pneumoniae</i>	13883	10-100	Good, Acid and gas production	>=70%	35±2°C	24-48 Hours
<i>Staphylococcus aureus</i>	6538	> 10 ³	Inhibited	-	35±2°C	24-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 10-25°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. Oliver J. D., Kaper J., 2001, Vibrio species. pp. 263-300 In: Food Microbiology: Fundamentals and Frontiers, (Doyle M.
2. P. et al, Editors), 2nd Ed., ASM Press. 1555811175.
3. Oliver J. D., 2005, "Wound infections caused by Vibrio vulnificus and other marine bacteria", Epidemiol. Infect. 133 (3): 383-91.
4. Bryant R. G., Jarvis J. and Janda J. M., 1987, Appl. Environ. Microbiol. 53:1556.
5. Vanderzant C. and Splittstoesser D. F., (Eds.), 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington, D.C.

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Barkstrasse 10, 48163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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