

TM 529 - MacCONKEY BROTH W/ BCP & NaCl (ISO 9308-2:2012, ISO 4832:2006)

INTENDED USE

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

PRODUCT SUMMARY AND EXPLANATION

MacConkey broth w/BCP & NaCl is a modification of the MacConkey medium in which the neutral red dye is replaced by Bromocresol purple. BCP is more sensitive to pH variations in the medium, therefore leads to better recovery. This medium is recommended by the ISO committee with the inclusion of bile salts, as a presumptive test medium for identification of coliforms from water and other materials of sanitary importance.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	20.000
Lactose	10.000
Bile salts	5.000
Sodium chloride	5.000
Bromocresol purple	0.010

PRINCIPLE

The medium contains Peptic digest of animal tissue which provides the nitrogenous and other essential growth compounds. Lactose is the source of fermentable carbohydrate. Sodium chloride maintains the osmotic balance of the medium. Bromocresol purple is less inhibitory, and it is more suitable pH indicator which changes colour from purple to yellow. It provides a more sensitive and definite indication of acid formation. Bile salts which inhibits the growth of gram-positive microorganisms

INSTRUCTION FOR USE

- Dissolve 40.01 grams in 1000ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense into test tubes with Durham's tube.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool the tubes to 45-50°C before inoculation.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	: Cream to yellow, homogeneous free flowing powder
Appearance of Prepared medium	: Purple coloured, Clear to slightly opalescent solution
pH (at 25°C)	: 7.4± 0.2

INTERPRETATION

Cultural characteristics observed with after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid production	Gas production	Incubation Temperature	Incubation Period
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<i>Escherichia coli</i>	8739	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction	30-35°C	18-48 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction	30-35°C	18-48 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	Positive reaction	Positive reaction	30-35°C	18-48 Hours
<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	-	-	30-35°C	18-48 Hours

PACKAGING

In 100 & 500 gm packaging size.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 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 powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. 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.
2. Childs E. and Allen, 1953, J. Hyg: Camb. 51:468-477.
3. International Organization for Standardization (ISO), 1990, Draft ISO/ DIS 9308-2.
4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
5. 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.
6. MacConkey A. T., 1900, The Lancet, ii: 20

 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 Lab Use Only**

Revision: 9th July 2019