

TMTH 024- MacCONKEY BROTH (USP/EP/BP/JP/IP)

INTENDED USE

For selective enrichment of *Escherichia coli* in accordance with harmonized method.

PRODUCT SUMMARY AND EXPLANATION

MacConkey Broth is a modification of MacConkey Medium. Childs and Allen demonstrated the inhibitory effect of neutral red and therefore substituted it by the less inhibitory bromocresol purple dye. BCP is more sensitive in recording pH variation in the medium. MacConkey Broth is recommended for presumptive identification of coliforms and is prepared in accordance with the harmonized method of USP/EP/BP/JP/IP. It is used as a presumptive test medium for coliforms in pharmaceutical products 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

Pancreatic digest of gelatin provides essential growth nutrients and serves as a rich nitrogen source. Ox-bile inhibits gram-positive organisms. Lactose monohydrate is the fermentable carbohydrate. Bromocresol purple is the pH indicator in the medium that turns yellow under acidic condition due to lactose fermentation. Gas produced gets entrapped in inverted Durhams tube.

INSTRUCTION FOR USE

Inoculate the sample and incubate at specified temperature and time.

QUALITY CONTROL SPECIFICATIONS

Appearance of prepared medium	:	Purple coloured solution.
Quantity of Medium	:	10 ml of medium in tubes.
pH (at 25°C)	:	7.3 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid/Gas production	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	+ve reaction Yellow color / +ve	30-35°C	<=24 Hours
<i>Escherichia coli</i>	8739	50-100	Luxuriant	+ve reaction Yellow color / +ve	42-44°C	<=24 Hours
# <i>Klebsiella aerogenes</i>	13048	50-100	Luxuriant	+ve / +ve	30-35°C	<=24 Hours



<i>Salmonella choleraesuis</i>	12011	50-100	Good	-ve / -ve	30-35°C	<=24 Hours
<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	-	30-35°C	>=48 Hours
<i>Staphylococcus aureus</i>	6538	≥1000	Inhibited	-	42-44°C	>=48 Hours

Formerly known as *Enterobacter aerogenes*

PACKAGING:

Pack of 50 Ready-To-Use Liquid Medium tubes containing 10 ml in each tube.

STORAGE

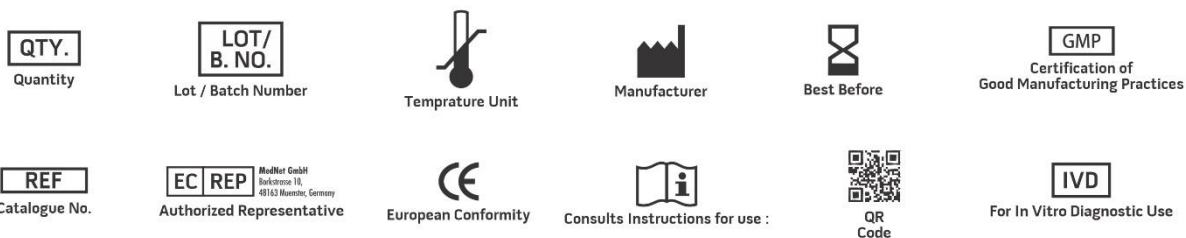
On receipt, store tubes in the dark at 10-25°C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Tubed media stored as labeled until just prior to use may be inoculated up to the expiration date and incubated for the recommended incubation times. Allow the medium to warm to room temperature before inoculation.

DISPOSAL

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

REFERENCES

1. MacConkey A. T., 1900, The Lancet, ii: 20.
2. Childs E. and Allen, 1953, J. Hyg: Camb. 51:468-477
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4. British Pharmacopoeia, 2011, The Stationery office British Pharmacopoeia
5. European Pharmacopoeia, 2011, European Dept. for the quality of Medicines.
6. Japanese Pharmacopoeia, 2008.
7. Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed, APHA Washington DC.
8. Indian Pharmacopoeia, 2010 Ministry of Health and Family Welfare Govt. of India



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

***For Lab Use Only**
Revision: 25th March. 2022

