TMPH 023 - VIOLET RED BILE GLUCOSE AGAR PLATE

INTENDED USE

For selection and subculture of bile tolerant organisms in accordance with the harmonized method of USP/EP/BP/JP/IP.

PRODUCT SUMMARY AND EXPLANATION

Violet Red Bile Glucose Agar is a selective medium recommended for detection and enumeration of Enterobacteriaceae especially the bile tolerant gram negative bacteria in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP (1,2,3,4) from non-sterile products and pharmaceutical preparations.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Glucose	10.00
Pancreatic digest of gelatin	7.000
Sodium chloride	5.000
Yeast extract	3.000
Bile salt mixture	1.500
Neutral red	0.030
Crystal violet	0.002

PRINCIPLE

Pancreatic digest of gelatin and yeast extract provide nitrogenous, carbonaceous compounds, long chain amino acids, vitamins and other nutrients essential for bacterial metabolism. This media is selective due to presence of the inhibitors for bile salts positive organisms especially Staphylococci. Neutral red indicator helps to detect glucose fermentation. Enterobacteriaceae, such as *Escherichia coli* and *Salmonella* spp., are able to ferment glucose and this results in production of acid and a decrease in pH that is indicated by neutral red which causes growth of the bacteria as pink colonies. Enough acid production will cause the precipitation of bile salts resulting in bile precipitate or halo around glucose fermenting bacteria. Bile salts and crystal violet act as selective agents inhibiting many Gram-positive bacteria. Sodium chloride maintains the osmotic equilibrium in the medium and agar acts as a solidifying agent.

INSTRUCTION FOR USE

Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Reddish purple color, clear to slightly opalescent gel.
Quantity of Medium	:	25ml of medium in 90mm plates.
pH (at 25°C)	:	7.4± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural response was observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	Pink-Red with bile precipitate	≥50%	30 - 35°C.	18-24 Hours
Escherichia coli	8739	50-100	Luxuriant	Pink-Red with bile precipitate	≥50%	30 - 35°C.	18-24 Hours
#Klebsiella aerogenes	13048	50-100	Luxuriant	Pink-Red	≥50%	30 - 35°C.	18-24 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	Pink- W or W/O bile precipitate	≥50%	30 - 35°C.	18-24 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	Pink- W or W/O bile precipitate	≥50%	30 - 35°C.	18-24 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	-	0%	30 - 35°C.	>=24Hours
Staphylococcus aureus	6538	≥1000	Inhibited	-	0%	30 - 35°C.	>=24Hours

*Formerly known as *Enterobacter aerogenes*

PACKAGING:

Doubled layered packing containing 5 No. of plates with one silica gel desiccant bag packed inside it.

STORAGE

On receipt, store the plates at 15–30 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation.

Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

DISPOSAL

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

REFERENCES

1. D.A.A. Mossel, et al., J. Bact. 84, 381. (1962).
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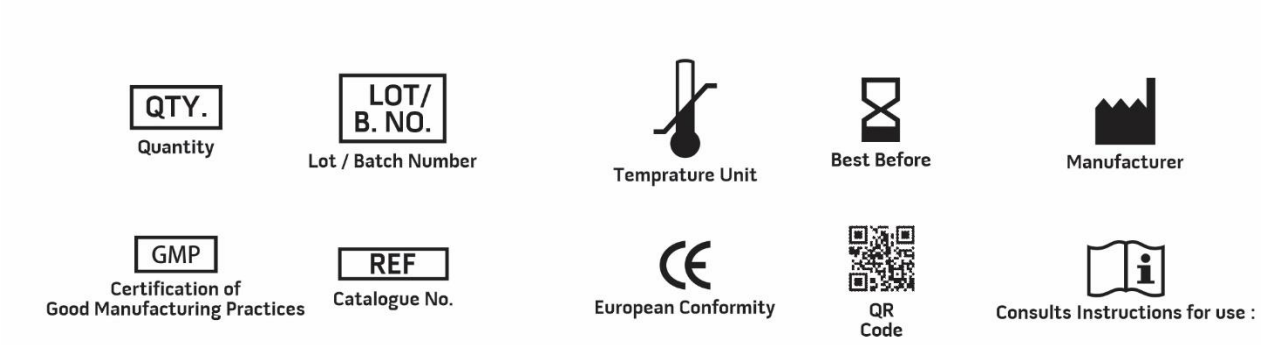
3. D.A.A. Mossel, et al., Appl. Microbiol. 20, 273. (1970).
4. D.L. Cousins, F. Marlatt, Enumeration of Enterobacteriaceae in milk, J. Food Protect., 53, 568 (1990).
5. American Public Health Association, Standard Methods for the Examination of Dairy Products, 15th ed. (1995).
6. J.G. Davis, Milk Testing - Dairy Industries Ltd., London, (1951). 7. R.G. Druce et al., J. Appl. Bact. 20, 1. (1957).



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

***For Lab Use Only**

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