

CM 21097 - MacCONKEY AGAR (W/ CV, NaCl, 0.15% BILE SALTS & 1% LACTOSE) (VEG.)

INTENDED USE

For isolation of coliform and lactose fermenting enteric bacteria.

PRODUCT SUMMARY AND EXPLANATION

These media are prepared by using vegetable peptone in place of animal based peptones which makes the medium free of BSE/TSE risks. MacConkey Agar (Veg) is the modification of MacConkey Agar which is the earliest selective and differential medium for cultivation of enteric microorganisms from a variety of clinical specimens.

These agar media contain crystal violet and are very selective compared to MacConkey agar (W/O CV, W/ 0.15% BILE SALTS & NaCl) (veg.). They suppress a number of gram-positive bacteria including Staphylococci.

COMPOSITION

Ingredients	Gms / Ltr
Veg peptone	1.500
Veg hydrolysate	1.500
Veg peptone No. 2	17.000
Lactose	10.000
Synthetic detergent	1.500
Sodium chloride	5.000
Neutral red	0.030
Crystal violet	0.001
Agar	15.000

PRINCIPLE

The medium consists of Veg Peptone, veg peptone No. 2 which are sources of nitrogen, carbon, long chain amino acids and other nutrients. Lactose is a fermentable carbohydrate; Sodium chloride maintains the osmotic equilibrium. Synthetic detergent and crystal violet are selective agents that inhibit growth of gram-positive organisms. Neutral red is the pH indicator dye.

INSTRUCTION FOR USE

Dissolve 51.53 grams in 1000 ml purified/ distilled water.

Heat to boiling with gentle swirling to dissolve the agar completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes. Avoid overheating.

Cool to 45 - 50°C and pour into sterile Petri plates. The surface of the medium should be dry when inoculated.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Pinkish beige coloured, homogeneous, free flowing powder.
Appearance of prepared medium	: Red with purplish tinge, clear to slightly opalescent gel forms in petri plates.
pH (at 25°C)	: 7.1±0.2

INTERPRETATION



Cultural characteristics observe after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Shigella flexneri	12022	50-100	Fair-good	20-40%	Colourless	30-35°C	18-72 Hours
Salmonella Paratyphi A	9150	50-100	Luxuriant	>=70%	Colourless	30-35°C	18-72 Hours
Proteus vulgaris	13315	50-100	Luxuriant	>=70%	Colourless	30-35°C	18-72 Hours
Salmonella Typhi	6539	50-100	Luxuriant	>=70%	Colourless	30-35°C	18-72 Hours
Salmonella Paratyphi B	8759	50-100	Luxuriant	>=70%	Colourless	30-35°C	18-72 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	Pink-red	30-35°C	18-72 Hours
Klebsiella aerogenes	13048	50-100	Luxuriant	>=70%	Pink to red	30-35°C	18-72 Hours
Enterococcus faecalis	29212	>=10 ⁴	Inhibited	0%	-	30-35°C	18-72 Hours
Salmonella Enteritidis	13076	50-100	Luxuriant	>=70%	Colourless	30-35°C	18-72 Hours
Staphylococcus aureus	25923	>=10 ⁴	Inhibited	0%	-	30-35°C	18-72 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.

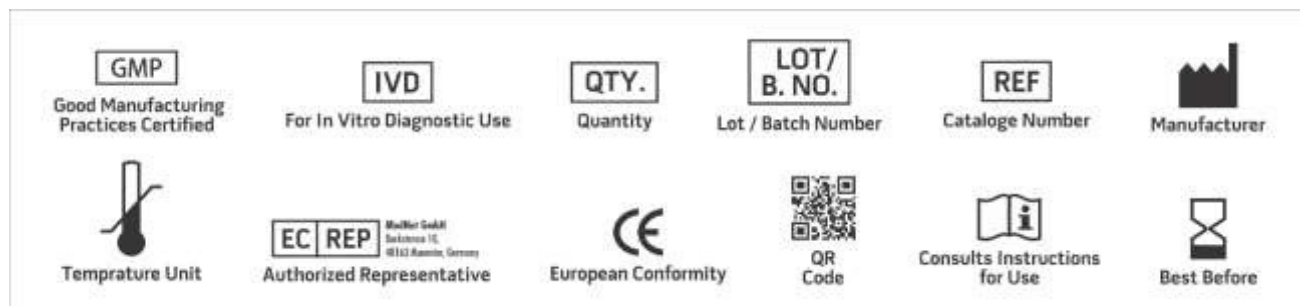
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

Afteruse, 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.
7. MacConkey, 1905, J. Hyg., 5:333.
8. Speck M. (Ed.), 1985, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.



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

*For LabUse Only

