MacConkey Agar without Crystal Violet, NaCl and with 0.5 % Sodium Taurocholate

Intended Use
MacConkey Agar without Crystal Violet, NaCl and with 0.5% Sodium Taurocholate is used for the cultivation and differentiation of enteric bacteria and potentially pathogenic Gram-positive organisms while restricting swarming of *Proteus* species.

Summary
MacConkey Agar is the earliest selective and differential medium for cultivation of enteric microorganisms from a variety of clinical specimens. Subsequently MacConkey Agar and Broth have been recommended for use in microbiological examination of foodstuffs and for direct plating / inoculation of water samples for coliform counts. These media are also accepted by the Standard Methods for the Examination of Milk and Dairy Products and pharmaceutical preparations.

Principle
Original medium contains protein, bile salts, sodium chloride and two dyes. The selective action of this medium is attributed to bile salts, which are inhibitory to most species of Gram-positive bacteria. MacConkey Agar w/o CV, NaCl and w/ 0.5% Sodium taurocholate is a modification of the original formulation with the exclusion of crystal violet and inclusion of sodium taurocholate instead of bile salts. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as red or pink and may be surrounded by a zone of acid precipitated bile. The red colour is due to production of acid from lactose, absorption of neutral red and a subsequent colour change of the dye when the pH of medium falls below 6.8.

Formula*

Ingredients	**g/L**
Peptone	20.0
Lactose	10.0
Neutral Red	0.04
Sodium Taurocholate	5.0
Agar	20.0
Final pH (at 25°C)	7.4 ± 0.2

*Adjusted to suit performance parameters.

Directions
1. Loosen the cap.
2. Melt the medium completely in a water bath at 100°C. Do not remove the cap of the bottle while melting.
3. Cool to 45°C-50°C, mix well and pour into presterile petriplate.

Quality Control
Appearance: Orange red coloured, gel without any bubbles.
Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C.

Organism (ATCC)	**Growth**	**Colour of Colony**
Escherichia coli (25922)	Good	Pink
Klebsiella aerogenes (13048)	Good	Pink
Proteus hauseri (13315)	Good	Colourless
Salmonella enterica subsp. *enterica* serovar *Typhimurium* (14028)	Good	Colourless
Staphylococcus aureus subsp. *aureus* (25923)	Good	Pale Pink
Enterococcus faecalis (29212)	Good	Pale Pink

Note: For good growth, growth obtained on the test media should not differ by a factor greater than 2 from the calculated value for a standardized inoculum.
Inoculum cfu for good growth is 10-100.

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Ensure that the temperature of water bath is at 100°C so that the medium melts completely. Cooler water baths give rise to lumpy, uneven medium.
3. Before pouring into sterile petriplates, gently swirl the bottle to check whether the entire contents are properly mixed and melted.
4. Good laboratory practices and hazard precautions must be observed at all times.
5. After use media containers, prepared plates, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

Storage and Stability

1. Store the ready to use MacConkey Agar without Crystal Violet, NaCl, and with 0.5% Sodium Taurocholate at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

Limitations

1. Incubation of plates under increased CO_2 has been reported to reduce the growth and recovery of a number of strains of Gram-negative bacilli.
2. Not all strains of *E. coli* ferment lactose.

Warranty

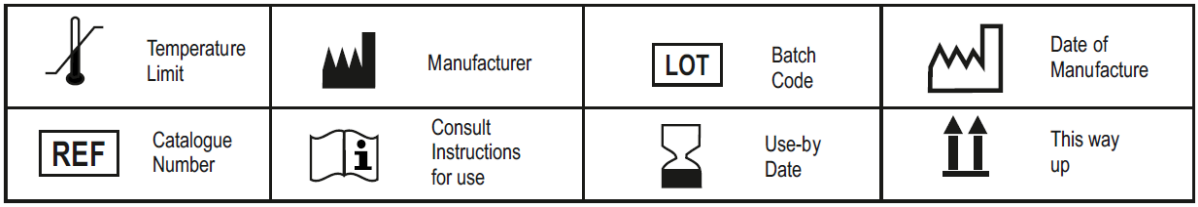
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. MacConkey, 1900, The Lancet, ii:20.
2. MacConkey, 1905, J. Hyg., 5:333.
3. Downes F. P and Ito K. (Ed.), 2001, Compendium of Methods for the
4. Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
203130770250	Bottle Media	6 x 250 mL
203130770100	Bottle Media	100 mL



Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.