MacConkey Broth (Harmonized)

Intended Use
MacConkey Broth is used for isolation and cultivation of coliforms from pharmaceutical products in accordance with microbial limit testing by harmonized methodology of USP/EP/BP/JP/IP.

Summary
MacConkey Broth is recommended for use in microbiological examination of clinical specimens, foodstuffs and for direct plating and inoculation of water samples for coliform counts. This medium is also included in the Official Methods of Analysis as well as pharmaceutical preparations and industrial products.

Principle
Pancreatic digest of gelatin provides amino acids and other growth factors. Lactose is a carbon and energy source. Dehydrated ox bile inhibits the growth of Gram-positive organisms. Bromocresol purple is the pH indicator.

Formula*

Ingredients	g/L
Pancreatic Digest of Gelatin	20.0
Lactose Monohydrate	10.0
Dehydrated Ox Bile	5.0
Bromocresol Purple	0.010
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Directions
1. Bring the MacConkey Broth (Harmonized) vial to the room temperature 22°C-30°C.
2. Use MacConkey Broth (Harmonized) as per required application.

Quality Control
Appearance: Purple coloured, clear solution without any precipitate.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/BP/JP/IP and growth is observed after an incubation at 42°C-44°C for 24-48 hours. Subculturing is carried out using MacConkey Agar after enrichment in MacConkey Broth (Harmonized) and incubated at 30°C-35°C for 18-72 hours.
Growth Promoting Properties: The test results observed are within the specified temperature and the shortest period of time, inoculating ≤100 cfu (at 42°C-44°C for 24 hours).
Inhibitory Properties: No growth of the test microorganism occurs for the specified temperature and longest period of time, inoculating >100 cfu (at 42°C-44°C for ≥ 48 hours).

Organism (ATCC)	Growth	Acid
Escherichia coli (8739)	Good	+
Staphylococcus aureus subsp. *aureus* (6538)	Inhibited	-

Key: For Acid (+): Positive, yellow colouration
For Acid (-): Negative, No colour change.

Note: No growth of the organism should occur for the inhibitory test.
Inoculum for good growth is 10-100 cfu and that for inhibition is greater than 100 cfu.

Remarks
1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Good laboratory practices and hazard precautions must be observed at all times.
3. After use media containers, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

4. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
5. Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media.
6. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be taken into account.

Storage and Stability

1. Store the ready to use MacConkey Broth (Harmonized) 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.

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, A. 1901. Centr. Bakt. 29:740.
2. MacConkey, A. 1905. Lactose-fermenting bacteria in faeces. J. Hyg. 5:333-379.
3. MacConkey, A. 1908. Bile salt media and their advantage in some bacteriological examinations. J. Hyg. 8:322.
4. Streptococcus faecalis. J. Hyg. Camb. 51:468-477.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
203130790010	Ready Prepared Tube	25 x 10 mL
203131440100	Bottle Media	100 mL
203130790100	Bottle Media	100 mL