BIOMARK Laboratories-INDIA

www.biomarklabs.com

TECHNICAL SHEET

PP011	MacConkey Agar w/ 0.15% Bile Salts, CV and NaCl Plate
Formula	
Ingredients:	gms/lit.
Peptone	1.50
Tryptone	1.50
Gelatin peptone	17.0
Lactose	10.0
Bile salts	1.50
Sodium chloride	5.00
Neutral red	0.03
Crystal violet	0.001
Agar	15.00
Final pH (at 25°	C): 7.1 <u>+</u> 0.2

Directions:

Label the ready to use plate (PP011). Either streak, inoculate or surface spread the test inoculum (50-100 CFU) aseptically on the plate.

Principle:

MacConkey agars are slightly selective and differential plating media mainly used for the detection and isolation of gram-negative organisms from clinical, dairy, food, water, pharmaceutical and industrial sources. Peptone, Tryptone and gelatin peptone are sources of nitrogen, carbon, long chain amino acids and other nutrients. Lactose is a fermentable carbohydrate; Sodium chloride maintains the osmotic equilibrium. Bile salts and crystal violet are selective agents that inhibit growth of gram-positive organisms. Neutral red is the pH indicator dye. Lactose-fermenting strains grow as red or pink colonies and may be surrounded by a zone of acid precipitated bile. The red color is due to production of acid from lactose, absorption of neutral red and a subsequent color change of the dye when the pH of medium falls below 6.8. Lactose non-fermenting strains, such as Shigella and Salmonella are colorless, transparent and typically do not alter appearance of the medium

(I) QC Tests				
pH:	7.1 ± 0.2			
Color:	Red with purplish tinge coloured medium			
Appearance:	Sterile MacConkey Agar w/o 15% Bile salts, CV and NaCl Agar in 90 X15mm disposable plate.			
(II)Sterility test	Passes release criteria			
(III)O.C. Test Microbiological				

(III)Q.C. Test Microbiological						
Cultural response was observed after an incubation at 30-35°C for 18-72 hours.						
MICROORGANISM (ATCC)	INOCULUM	GROWTH	RECOVERY	COLOUR OF		
	(CFU)			COLONY		
Escherichia coli 25922	50 -100	luxuriant	≥50 %	pink to red with bile precipitate		
Escherichia coli NCTC 9002	50 -100	luxuriant	≥50 %	pink to red with bile precipitate		
Enterobacter aerogenes13048	50 -100	luxuriant	≥50 %	Pink to Red		
Enterococcus faecalis 29212	50 -100	Fair to good	30 -40 %	Colorless to pale pink		
Salmonella Typhimurium 14028	50 -100	luxuriant	≥50 %	Colourless		
Staphylococcus aureus 6538	≥10³	inhibited	≤0 %	-		
Staphylococcus aureus 25923	≥10³	inhibited	≤0 %	-		
Salmonella Enteritidis 13076	50 -100	luxuriant	≥50 %	Colorless		
Salmonella Paratyphi (A) 9150	50 -100	luxuriant	≥50 %	Colorless		
Salmonella Paratyphi (B) 8759	50 -100	luxuriant	≥50 %	Colorless		
Salmonella Typhi6539	50 -100	luxuriant	≥50 %	Colorless		
Salmonella Abony NCTC 6017	50 -100	luxuriant	≥50 %	Colorless		
Proteus vulgaris 13315	50 -100	luxuriant	≥50 %	Colorless		
Shigella flexneri 12022	50 -100	Fair to good	30 -40 %	Colorless to pale pink		
Staphylococcus epidermidis 12228	≥10³	inhibited	≤0 %	-		
Corynebacterium diphtheriae type	≥10³	inhibited	≤0 %	-		
gravis						

Refer disclaimer Overleaf

BIOMARK Laboratories-INDIA www.biomarklabs.com

TECHNICAL SHEET

Precautions:	1. In Vitro diagnostic use only.			
	2. Read the label before opening the container			
Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be			
	encountered that fail to grow or grow poorly on this medium.			
Use:	For selective isolation and differentiation of coliform organisms and other enter			
	pathogens.			
Storage:	Store between 2-8°C. Use before expiry date on the label.			
Packing:	10/20/50 disposable plates.			

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

The information contained in this publication is based on our in-house studies and market performance and is to the best of our knowledge true and accurate. BIOMARK LABORATORIES reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.

Page 02 of 02

Rev: March 2025