

BIOMARK Laboratories – INDIA

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TECHNICAL SHEET

B604	Mac Conkey Agar w/Bromo Thymol Blue		
Formula			
Ingredients :		gms/lit.	
Peptic digest of animal tissue		17.00	
Proetose peptone		3.00	
Lactose		10.00	
Bile Salts		1.50	
Sodium Chloride		5.00	
Bromothymol blue		0.03	
Agar		15.00	
Final pH (at 25°C) : 7.1± 0.2			
Directions :			
Suspend 51.53 g of medium in 1000 ml. distilled water. Heat to boiling with gentle swirling to dissolve the agar completely. Sterilize by autoclaving at 15 lbs 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.			
Principle: Proetose peptone and Peptic digest of animal tissue are sources of nitrogen and other nutrients. Lactose is a fermentable carbohydrate. When lactose is fermented, a local pH drop around the colony causes a colour change in the pH indicator. Bile salt is selective agents that inhibit growth of gram –positive organisms. Agar is a solidifying agent.			
QC Tests – (I) Dehydrated Medium			
Colour :	Cream to yellow		
Appearance :	Homogeneous Free Flowing powder		
(II) Rehydrated medium			
pH (post autoclaving/heating) :	7.1 ± 0.2		
Colour (post autoclaving/heating) :	Green		
Clarity (post autoclaving/heating) :	Clear to slightly opalescent		
(III) Q.C. Test Microbiological			
Cultural characteristics observed after 18 – 24 hours at 35- 37°C.			
MICROORGANISM (ATCC)	GROWTH	COLOUR OF COLONY	
Enterobacter aerogenes (13048)	Luxuriant	Yellow	
Escherichia coli (25922)	Luxuriant	Yellow	
Proteus vulgaris (13315)	Luxuriant	Colourless to light blue	
Salmonella typhi (6539)	Luxuriant	Colourless to light blue	
Shigella flexneri (12022)	Luxuriant	Colourless to light blue	
Enterococcus faecalis (29212)	Inhibited	--	
Staphylococcus aureus (25923)	Inhibited	--	
Precautions :	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.		

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Limitations :	1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.				
	2. Although MacConkey media are selective primarily for gram – negative enteric bacilli, biochemical and, if indicated, serological testing using pure cultures are recommended for complete identification. Consult appropriate references for further information.				
	3. Incubation of MacConkey Agar plates under increased CO ₂ has been reported to reduce the growth and recovery of a number of strains of gram – negative bacilli.				
Use :	B604: For detection of lactose fermenting enteric bacteria.				
Storage :	Dehydrated medium- below 30°C Prepared medium– Between 2 to 8°C.				
Packing :	500 gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
	B604	51.53g/L	9.703L	7.1± 0.2	NIL