

BIOMARK Laboratories – INDIA

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TECHNICAL SHEET

B603	MAC CONKEY AGAR W/1.35% AGAR, CV, NACL & 0.15% BILE SALTS		
Formula			
Ingredients :		gms/lit.	
Peptic digest of animal tissue		1.50	
Casein enzymic hydrolysate		1.50	
Pancreatic digest of gelatin		17.00	
Lactose		10.00	
Bile Salts		1.50	
Sodium chloride		5.00	
Crystal violet		0.001	
Neutral red		0.03	
Agar		13.50	
Final pH (at 25°C) : 7.1 ± 0.2			
Directions :			
Suspend 50.00 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: Peptic digest of animal tissue is 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 (neutral red) Bile salt is selective agents that inhibit growth of gram –positive organisms. Agar is a solidifying agent.			
QC Tests – (I)Dehydrated Medium			
Colour :		Pinkish beige	
Appearance :		Homogeneous Free Flowing powder	
(II)Rehydrated medium			
pH (post autoclaving/heating) :		7.1 ± 0.2	
Colour (post autoclaving/heating) :		Red with purplish tinge	
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	Pink to red	
Escherichia coli (25922)	Luxuriant	Pink to red with bile precipitate	
Escherichia coli (8739)	Luxuriant	Pink to red with bile precipitate	
Escherichia coli (NCTC9002)	Luxuriant	Pink to red with bile precipitate	
Proteus vulgaris (13315)	Luxuriant	Colourless	
Salmonella enteritidis (13076)	Luxuriant	Colourless	
Salmonella typhi (6539)	Luxuriant	Colourless	
Salmonella paratyphi A	Luxuriant	Colourless	
Salmonella paratyphi B	Luxuriant	Colourless	
Salmonella Abony (NCTC6017)	Luxuriant	Colourless	
Salmonella Typhimurium (14028)	Luxuriant	Colourless	
Shigella flexneri (12022)	Fair to good	Colourless	
Enterococcus faecalis (29212)	None - poor	Colourless to pale pink	
Staphylococcus aureus (25923)	Inhibited	--	
Staphylococcus epidermidis (12228)	Inhibited	--	
Staphylococcus aureus (6538)	Inhibited	--	

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Precautions :	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.				
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. Due to the selective properties of MacConkey Agar CV, some strains of gram – negative enteric bacilli may be encountered that fail to grow or grow poorly on this medium. Some strains of gram – positive organisms may be encountered that are not inhibited or only partially inhibited on this medium ; some strains of enterococci may grow on MacConkey Agar CV after prolonged incubation. 4. 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. 5. For optimal performance, plates prepared from MacConkey Agar CV should be incubated under aerobic conditions.				
Use:	For selective isolation and differentiation of lactose fermenting and lactose non fermenting enteric bacteria, as per B.P.				
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
B603	50g/L	10.0L	7.1± 0.2	NIL	121°C /15 min.

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