

BIOMARK Laboratories – INDIA
www.biomarklabs.com **TECHNI**
CAL SHEET

B1804	MacConkeys Agar w/ sodium chloride, w/ Sodium pyruvate		
Formula			
Ingredients:	gms/lit.		
Peptic digest of animal tissue	15.00		
Meat extract powder	2.00		
Yeast extract powder	3.3		
Sodium pyruvate	2.00		
Lactose	15.00		
Bile salt	4.5		
Neutral red	0.05		
Agar	12.0		
Final pH (at 25°C):	7.4 ± 0.2		
Directions:			
Suspend 54 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 drops 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) :	7.4 ± 0.2		
Colour (post autoclaving/heating):	Orange red		
Clarity (post autoclaving/heating):	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)	good-luxuriant	Pink to red	
Escherichia coli (25922)	good-luxuriant	Pink to red with bile precipitate	
Proteus vulgaris (13315)	good-luxuriant	Colourless	
Salmonella enteritidis (13076)	good-luxuriant	Colourless	
Salmonella typhi (6539)	good-luxuriant	Colourless	
Salmonella paratyphi A	good-luxuriant	Colourless	
Salmonella paratyphi B	good-luxuriant	Colourless	
Shigella flexneri (12022)	good-luxuriant	Colourless	
Enterococcus faecalis (29212)	None to poor	Pale pink to red	
Staphylococcus aureus (25923)	None to poor	Pale pink to red	
Precautions:	1. For Laboratory Use. 2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.		

Refer disclaimer over leaf

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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:	For cultivation and differentiation of enteric bacteria, restricting swarming of Proteus species from specimens like urine which may contain large number of Proteus species as well as potentially pathogenic gram-positive organisms.				
Storage:	Dehydrated medium - below 30°C Prepared medium - Between 2 to 8°C.				
Packing:	500gm. bottle				
Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B1373	54 g/L	9.25L	7.4 ± 0.2	NIL	121°C/15 min.

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 BIOMARK LABORATORIES 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.