

BIOMARK Laboratories-INDIA
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TECHNICAL SHEET

B599	MIU MEDIUM BASE				
Formula					
Ingredients :					
		gms/lit.			
Casein enzymic hydrolysate		10.00			
Dextrose		1.00			
Sodium chloride		5.00			
Phenol red		0.01			
Agar		2.00			
Final pH (at 25°C) : 6.8 ± 0.2					
Directions :					
Suspend 18 grams in 950 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in 95 ml amounts into flasks and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to about 50-55°C and add aseptically 5 ml sterile 40% Urea solution (BF048) per 95 ml basal medium. Mix well and dispense into sterile test tubes. Allow to cool in an upright position.					
Principle :					
Product profile:	Enzymic hydrolysate provides amino acids and other nitrogenous substances. Dextrose is the fermentable carbohydrate. Sodium chloride maintains osmotic pressure (500µm). Phenol red is the pH indicator. When urea is utilized, ammonia is formed during incubation which makes the medium alkaline showing a pink – red colour by the change in phenol red indicator. Indole is produced from tryptophan present in casein enzymic hydrolysate. The Indole produced combines with the aldehyde present in the Kovac's reagent to form a red complex. Motile organisms show either diffused growth or turbidity away from stab line.	Quantities	pH (25°C)	Supplement	Sterilization
QC Tests – (I) Dehydrated Medium					
Colour :	Light pink to light orange				
Appearance :	Homogeneous Free Flowing powder				
(II) Rehydrated medium					
pH (post autoclaving/heating) :	6.8 ± 0.2				
Colour (post autoclaving/heating) :	Yellow orange				
Clarity (post autoclaving/heating) :	Clear to slightly opalescent				
(III) Q.C. Test Microbiological					
Cultural characteristics observed with added 40% Urea solution (BF048) after an incubation at 35-37°C for 18 - 24 hours.					
MICROORGANISM (ATCC)	GROWTH	MOTILITY	INDOLE	UREASE	
Escherichia coli (25922)	Luxuriant	+ ,growth away from stabline causing turbidity	+ ,red ring at the interface of the medium	negative reaction, no change	
Klebsiella pneumoniae (13883)	Luxuriant	- ,growth along the stabline , surrounding medium remains clear	- ,no colour development / cloudy ring	weakly positive	
Proteus vulgaris (13315)	Luxuriant	+ ,growth away from stabline causing turbidity	+ ,red ring at the interface of the medium	positive reaction, cerise colour	
Proteus mirabilis (25933)	Luxuriant	+ ,growth away from stabline causing turbidity	- ,no colour development / cloudy ring	positive reaction, cerise colour	
Salmonella typhimurium (14028)	Luxuriant	+ ,growth away from stabline causing turbidity	- ,no colour development / cloudy ring	negative reaction, no change	

Refer disclaimer Overleaf

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B599	18g/l	27.777L	6.8 ± 0.2	40% Urea solution (BF048)	121 ⁰ C / 15 minutes
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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.
Use :	For detection of motility, urease and indole production.
Storage :	Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.
Packing :	500 gm. bottle

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.

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