

TECHNICAL SHEET

B1221	MUG NUTRIENT AGAR				
Formula					
Ingredients:		gms/lit.			
Peptic digest of animal tissue		5.00			
Sodium chloride		5.00			
Beef extract		1.50			
Yeast extract		1.50			
4-Methylumbelliferyl β-D-Glucuronide (MUG)		0.10			
Agar		15.00			
Final pH (at 25°C) : 7.4 ± 0.2					
Directions :					
Suspend 28.1 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.					
Principle :					
Peptic digest of animal tissue, beef extract and yeast extract provide nitrogenous compounds and vitamin B complex. MUG is cleaved by the enzyme beta-glucuronidase of E.coli to release 4-methylumbelliferone which produces visible green-blue fluorescence under long wave UV light .					
QC Tests - (I) Dehydrated Medium					
Colour :		Cream to yellow			
Appearance :		Homogeneous Free Flowing powder			
(II) Rehydrated medium					
pH (post autoclaving/heating) :		7.4 ± 0.2			
Colour (post autoclaving/heating) :		Light amber			
Clarity (post autoclaving/heating) :		clear to slightly opalescent gel			
(III) Q.C. Test Microbiological					
Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours					
MICROORGANISM (ATCC)		GROWTH		Fluorescence (under UV light at 366 nm)	
Escherichia coli (25922)		good-luxuriant		positive	
Pseudomonas aeruginosa (27853)		good-luxuriant		negative	
Staphylococcus aureus (25923)		good-luxuriant		negative	
Streptococcus pyogenes (19615)		good-luxuriant		negative	
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 :		It is used for detection of Escherichia coli in water and food samples by a fluorogenic procedure.			
Storage :		Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.			
Packing :		500 gm bottle			
Product profile:		Reconstitution		Quantity on Preparation (500g)	
B1221		28.10 g/l		17.793 L	
				pH (25°C)	
				Supplement	
				Sterilization	
				7.4 ± 0.2	
				NIL	
				121°C/15 minutes	

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.

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