B813	**MUG SORBITOL AGAR**

Formula

Ingredients :	**gms/lit.**
Peptic digest of animal tissue	17.00
Proteose peptone	3.00
D-Sorbitol	10.00
Bile salts mixture	1.50
Sodium chloride	5.00
Neutral red	0.03
Crystal violet	0.001
4-Methylumbelliferyl ß-D-Glucuronide (MUG)	0.10
Agar	13.50

Final pH (at 25°C) : 7.1 ± 0.2

Directions :

Suspend 50.13 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 :

Bile salts mixture and crystal violet in the medium inhibit most of the grampositive organisms, which accompany the specimen many times. Sorbitol, a polyhydric alcohol corresponding to glucose, serves as a substrate to determine the cleavage of sorbitol by sorbitol degrading microorganisms. Sorbitol degrading microorganisms produce pink to red colonies while sorbitol negative colonies are colourless. MUG (4-Methyl-umbellifery ß-D-Glucuronide) is converted into a fluorescent product 4-Methyl-umbelliferone by the ß-D-glucuronidase-producing organisms.

QC Tests – (I)Dehydrated Medium		
	Colour :	Light yellow to pink
	Appearance :	Homogeneous Free Flowing powder
(II)Rehydrated medium		
	pH (post autoclaving/heating) :	7.1 ± 0.2
	Colour (post autoclaving/heating) :	Purplish red
	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	COLOUR OF COLONY	SORBITOL	FLUORESCENCE (UNDER UV)*
Escherichia coli O157:H7	good-luxuriant	colourless	negative reaction	negative
Escherichia coli (25922)	luxuriant	Pink - red	Positive reaction	positive
Staphylococcus aureus (25923)	inhibited	---	--	--

* - Fluorescence can be visualized on addition of NaOH solution or exposure to ammonia fumes.

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 the isolation and identification of enteropathogenic Escherichia coli associated with infant diarrhea by fluorogenic method.
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
B813	50.13 g/l	9.974 L	7.1 ± 0.2	NIL	121°C/ 15 minutes

Refer disclaimer Overleaf

Rev: December 2020

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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