B830	**MUG MACCONKEY AGAR**

Formula

Ingredients :	**gms/lit.**
Peptic digest of animal tissue	20.00
Lactose	10.00
Bile salt mixture	1.50
Sodium chloride	5.00
Neutral red	0.03
Crystal violet	0.001
4-Methylumbelliferyl β-D- glucuronide (MUG)	0.10
Agar	15.00

Final pH (at 25°C) : 7.1 ± 0.2

Directions :

Suspend 51.63 gms. in 1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize By autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring.

Principle :

Peptic digest of animal tissue provide essential nitrogen compoundsfor the growth of coliforms. Lactose is the fermentable carbohydrate source. Bile salts and crystal violet inhibit the growth of gram- positive bacteria. Neutral red is the pH indicator. MUG is cleved by the enzyme glucuronidase to release an end product 4- methylumbelliferone which produces a visible greenish – blue fluorescence under long wave ultra – violet light (366 nm).

QC Tests – (I)Dehydrated Medium		
	Colour :	Pinkish yellow
	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 hrs. at 35-37°C.	

	MICROORGANISM (ATCC)	GROWTH	FLUORESCENCE	
	Enterobacter aerogenes (13048)	Luxuriant	-	
	Escherichia coli (25922)	Luxuriant	+	
	Key : + = fluorescence at 366nm			

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 selective isolation and detection of lactose fermenting coliform organisms 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)	pH (25°C)	Supplement	Sterilization
B830	51.63g/l	9.684L	7.1 ± 0.2	NIL	121^0C / 15 minutes