B844	LACTOBACILLUS MRS AGAR

Formula

Ingredients:	**gms/lit.**
Proteose peptone	10.00
Meat Extract B#	10.00
Yeast extract	5.00
Dextrose	20.00
Polysorbate 80	1.00
Ammonium citrate	2.00
Sodium acetate	5.00
Magnesium sulphate	0.10
Manganese sulphate	0.05
Dipotassium hydrogen phosphate	2.00
Agar	12.00

#- Equivalent to Beef extract

Final pH (at 25°C): 6.5 + 0.2

Directions:

Suspend 67.15 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.
Note: Powder have tendency to form soft lumps which can be easily broken down to powder form.

Principle:

Lactobacillus MRS Agar contain Proteose Peptone, Meat Extract B, Yeast extract and Dextrose. These ingredients supply nitrogen, carbon and other elements necessary for growth. Polysorbate 80, Acetate, Magnesium and Manganese sulphate provide growth factors for culturing a variety of lactobacilli. The above ingredients may inhibit the growth of some organisms other than lactobacilli. Lactobacilli are microaerophilic and generally require layer plates for aerobic cultivation on solid media. When the medium is set, another layer of un-inoculated MRS Agar is poured over the surface to produce a layer plate. Lactobacilli isolated on MRS Agar should be further confirmed biochemically.

Type of specimen : Clinical samples - Urine, Faeces, etc.; Food and dairy samples.

Specimen Collection and Handling:
For clinical samples follow appropriate techniques for handling specimens as per established and current guidelines of clinical microbiology.
For food and dairy samples, follow appropriate techniques for sample collection and processing as per standard and current guidelines of food and dairy microbiology.
After use, contaminated materials must be sterilized by autoclaving before discarding.

QC Tests – (I)Dehydrated Medium			
	Colour:	Cream to light yellow	
	Appearance:	Homogeneous Free Flowing powder	
(II)Rehydrated medium			
	pH (post autoclaving/heating):	6.5 ± 0.2	
	Colour (post autoclaving/heating):	Medium to dark amber	
	Clarity (post autoclaving/heating):	Clear to slightly opalescent	
(III)Q.C. Test Microbiological			
	Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours or longer. (With 5% CO2).		
	MICROORGANISM (ATCC)	GROWTH	RECOVERY
	Lactobacillus fermentum (9338)	Luxuriant	>=50%
	Lactobacillus leichmanni (7830)	Luxuriant	>=50%
	Lactobacillus plantarum (8014)	Luxuriant	>=50%
	Lactobacillus casei (9595)	Luxuriant	>=50%
	Lactobacillus saki (15521)	Luxuriant	>=70%

Refer disclaimer Overleaf

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	Lactobacillus lactis (19435)	Luxuriant	>=70%
	Pediococcus pentosaceas (33316)	Luxuriant	>=70%

Warning & Precautions :	1. For In vitro diagnostic Use.By professionals only.
	2. Read the label carefully before opening the container.Wear PPE wares.Follow established good microbiology laboratory practices while handling specimens and cultures and take standard precautions for handling clinical specimens.
	3. For safety guidelines refer individual safety data sheet.
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.Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
	3.Further biochemical and serological tests must be carried out for complete identification.
	4.Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.
Use:	For cultivation of all Lactobacillus species from clinical and non- clinical samples.
Storage:	Dehydrated medium and prepared medium – Between 2 to 8°C.
Disposal:	Ensure safe disposal by autoclaving/or incineration of used or usable preparation of this product. Follow established laboratory procedures while disposing all infectious material and those coming in contact must be decontaminated and disposed off with existing laboratory technics.
Packing:	500 gm. bottle

Product profile:	Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement	Sterilization
B844	67.15 g/l	7.44lit	6.5 ± 0.2	Nil	121^{0}C/15 min

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