

MRS Broth w/o Glucose

Liquid medium for cultivating lactobacilli from clinical and nonclinical specimens.

TYPICAL FORMULA	(g/l)
Peptone	10.0
Beef Extract	8.0
Yeast Extract	5.0
Polysorbate 80	1.0
Ammonium Citrate	2.0
Sodium Acetate, Anhydrous	3.0
Magnesium Sulfate	0.1
Manganese Sulfate	0.05
Dipotassium Phosphate	1.0
Final pH 6.2 ± 0.2 at 25°C	

DESCRIPTION

MRS Broth w/o Glucose is a liquid medium used for supporting the luxuriant growth of all lactobacilli from oral, fecal, dairy and other sources. A desired carbohydrate can be incorporated into the medium to rise selectivity.

PRINCIPLE

Peptone and beef extract provide amino acids, nitrogen, carbon, minerals, vitamins and other nutrients necessary for organisms growth. Yeast extract is a source of vitamins, particularly of B-group. Polysorbate 80 is a surfactant, facilitating uptake of nutrients by lactobacilli. Ammonium citrate and sodium acetate may act as selective agents inhibiting some organisms other than lactobacilli. Magnesium sulfate and manganese sulfate provide cations used in metabolism. Dipotassium phosphate acts as buffering.

PREPARATION

Suspend 29.2 g of powder in 1 liter of deionized or distilled water. Add the carbohydrate of choice. Bring to boil and shake until completely dissolved. Distribute in final containers. Sterilize at 121°C for 15 minutes.

TECHNIQUE

Inoculate tubes and incubate at 35 ± 2°C for up to 72 h.

INTERPRETATION OF RESULTS

Turbidity indicates microbial growth.

Organisms other than lactobacilli may grow in this medium. Subculture to appropriate solid media and confirm isolates by appropriate biochemical testing.

STORAGE AND TRANSPORT CONDITIONS

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is designed for *in vitro* diagnostic use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

- de Man J.C., M. Rogosa and M.E. Sharpe (1960) A medium for the cultivation of lactobacilli. J. Bacteriol 23:130.
- Murray P.R., E.J. Baron, M.A. Pfaller, F.C. Tenover, R.H. Tenover (1995) Manual of Clinical Microbiology 6th ed. American Society for Microbiology, Washington D.C.



PRODUCT SPECIFICATIONS

NAME

MRS Broth w/o Glucose

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
610144	500 g	500 g of powder in plastic bottle
620144	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

6.2 ± 0.2

USE

MRS Broth w/o Glucose is a liquid medium used for supporting the luxuriant growth of all lactobacilli from oral, fecal, dairy and other sources. A desired carbohydrate can be incorporated into the medium to rise selectivity

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: yellow-tan

Ready-to-use medium

Appearance: clear to very slightly opalescent

Colour: amber

SHELF LIFE








4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: ≤100 CFU
Incubation Conditions: 18-48 h at 35 ± 2°C, in aerobiosis

Microorganism		Growth
<i>Lactobacillus fermentum</i>	ATCC® 9338	Good
<i>Lactobacillus delbrueckii</i>	ATCC® 10118	Good
<i>Lactobacillus lactis</i>	ATCC® 19435	Good

TABLE OF SYMBOLS

LOT	Batch code	IVD	<i>In vitro</i> Diagnostic Medical Device		Manufacturer		Use by		Fragile, handle with care
REF	Catalogue number		Temperature limitation		Contains sufficient for <n> tests		Caution, consult instructions for use		Do not reuse



LIOFILCHEM® S.r.l.

Via Scozia, Zona Ind.le - 64026, Roseto degli Abruzzi (TE) - ITALY
Tel +39 0858930745 Fax +39 0858930330 Website: www.liofilchem.net E-mail: liofilchem@liofilchem.net

