MRS AGAR

INTENDED USE
MRS Agar (for deMan, Rogosa, Sharpe) is used for the cultivation of lactobacilli.

FORMULA
Ingredients in grams per liter of purified water

Peptone	10.00	Sodium acetate	5.00
Meat extract	10.00	Magnesium sulfate	0.10
Yeast extract	5.00	Manganese sulfate	0.05
Dextrose	20.00	Potassium phosphate	2.00
Polysorbate 80	1.00	Agar	15.00
Ammonium citrate	2.00		

Adjusted and/or supplemented as required to meet performance criteria.

STORAGE
Bottles: 2 - 8°C
Dehydrated media: 2 - 30°C
The expiration date on the product label applies to the product in its intact packaging when stored as directed.

DIRECTIONS FOR PREPARATION
For dehydrated media
1. Dissolve 70 g in 1 L of purified water. Mix thoroughly.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave for 15 minutes at 121°C.

For bottle media
1. Heat the bottle at 95-100°C in water bath.
2. Mix well and cool to 45-47°C.
3. Poor in Petri plate and let solidified on a cool horizontal surface.

LIMITATION OF THE PROCEDURE
This product is for laboratory use only.
Organisms other than lactobacilli may grow in this medium. Isolates must be confirmed as lactobacilli by appropriate biochemical testing.

QUALITY CONTROL
Physical appearance: Prepared medium is solid, amber color.
Final pH: 6.5 ± 0.2 at 25°C

Expected Cultural Response

Organism	Inoculum CFU	Incubation	Results
Bacillus cereus ATCC 11778 • WDCM 00001	10^3-10^4	1 to 3 days at 35±2°C	Inhibition
Escherichia coli ATCC 8739 • WDCM 00012	10^3-10^4	1 to 3 days at 35±2°C	Inhibition
Lactobacillus sakei ATCC 15521 • WDCM 00012	100 ± 20	1 to 3 days at 35±2°C	Growth, PR ≥ 0,7

This is an example of organisms routinely used for testing

REFERENCE

1. DeMan, Rogosa and Sharpe. 1960. A medium for the cultivation of *Lactobacilli*. Journal of Applied Bacteriology. 23:130-135.
2. ISO 15214:1998. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of mesophilic lactic acid bacteria - Colony-count technique at 30°C.
3. ISO 20128:2006 [IDF 192:2006]. Milk products - Enumeration of presumptive Lactobacillus acidophilus on a selective medium - Colony-count technique at 37°C.