

CM 20907 – LACTOBACILLI SELECTION OXGALL AGAR BASE

INTENDED USE

For selective isolation, cultivation and enumeration of Lactobacilli.

PRODUCT SUMMARY AND EXPLANATION

Lactobacilli grow in a variety of habitats, wherever high levels of soluble carbohydrate, protein background products, vitamins and a low oxygen tension occur. These sites include the oral cavity, the intestinal tract, the vagina, food products and dairy products.

Lactobacillus Selection Oxgall Agar Base, formulated by Gilliland and Speck is recommended by APHA for the isolation and enumeration of lactobacilli. Lactobacillus Selection Oxgall Agar Base is similar in composition to Lactobacillus Selection Agar Base, the only difference being the additional oxgall added to the former.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	10.000
Yeast extract	5.000
Dextrose	20.000
Sodium acetate	25.000
Monopotassium hydrogen phosphate	6.000
Ammonium citrate	2.000
Oxgall	1.500
Polysorbate 80	1.000
Magnesium sulphate	0.575
Manganese sulphate	0.120
Ferrous sulphate	0.034
Agar	15.000

PRINCIPLE

This medium consists of Casein enzymic hydrolysate and yeast extract which serve as sources of essential nutrients. Dextrose is the carbohydrate and energy source. Polysorbate 80 serves as an additional source of growth factors and fatty acids required for metabolism of Lactobacillus species. Selectivity of the medium is obtained due to the presence of ammonium citrate and sodium acetate. These inhibit the accompanying microbial and fungal flora and also restrict swarming of colonies. The low acidic pH of the medium obtained by addition of glacial acetic acid is inhibitory to several bacterial species. Sulphates provide essential ions. Lactobacillus Selection Oxgall Agar Base is made selective for bile-resistant lactobacilli by incorporating 0.15% oxgall.

INSTRUCTION FOR USE

Dissolve 86.23 grams in 1000 ml purified/distilled water containing 1.32 ml glacial acetic acid.

Heat to boiling with frequent stirring for 1-2 minutes to dissolve the medium completely. DO NOT AUTOCLAVE.

If storage is necessary, autoclave at 12 psi pressure for 15 minutes.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Yellow coloured clear to slightly opalescent gel forms in Petri plates.
pH (at 25°C)	: 5.4 ± 0.2

INTERPRETATION

Cultural characteristics observed in presence of 3-5% Carbon dioxide (CO₂) after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Enterococcus faecalis	29212	≥10 ³	Inhibited	0%	35-37°C	48 Hours
Lactobacillus acidophilus	4356	50-100	Luxuriant	≥50%	35-37°C	48 Hours
Lactobacillus casei	9595	50-100	Luxuriant	≥50%	35-37°C	48 Hours
Lactobacillus plantarum	8014	50-100	Luxuriant	≥50%	35-37°C	48 Hours
Proteus vulgaris	13315	≥10 ³	Inhibited	0%	35-37°C	48 Hours
Staphylococcus aureus	25923	≥10 ³	Inhibited	0%	35-37°C	48 Hours
Escherichia coli	25922	≥10 ³	Inhibited	0%	35-37°C	48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

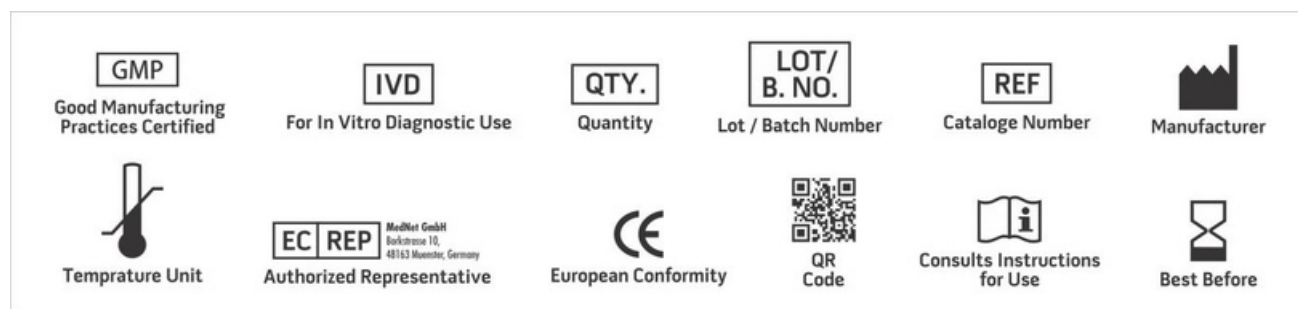
DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.



REFERENCES

1. Balows A., Truper H. G., Dworkin M., Harder W., Schleifer K. H., (Eds.), The Prokaryotes, 2nd Ed., 1992, Springer-Verlag
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3. Ellis R. F. and Sarles W. B., 1958, J. Bacteriol., 75:272.
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5. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
6. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
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8. Gilliland S. E., Speck M. L., and Morgan C. G., 1975, Appl. Microbiol., 30:541.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only

