

PNY Medium

Intended Use

PNY Medium is used for cultivation and isolation of *Lactobacillus* species.

Summary

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.

Principle

Peptic digest of animal tissue and yeast extract provide amino acids, other nitrogenous nutrients, vitamin B complex etc. Dextrose is the fermentable carbohydrate. The phosphates form buffering system while sodium chloride maintains osmotic equilibrium. Other salts supply essential nutrients for the growth of the organisms.

Formula*

Ingredients	g/L
Peptic digest of animal tissue	5.0
Yeast extract	5.0
Dextrose	5.0
Monopotassium phosphate	0.5
Dipotassium phosphate	0.5
Magnesium sulphate	0.25
Ferrous sulphate	0.01
Manganese sulphate	0.01
Sodium chloride	0.01
Copper sulphate	0.001
Cobalt sulphate	0.001
Zinc sulphate	0.001
Agar	15.0
Final pH (at 25°C)	6.0 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of Specimen

Clinical samples; Food, Milk and dairy samples

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines.

For food and dairy samples, follow appropriate techniques for handling specimens as per established guidelines.

For water samples, follow appropriate techniques for handling specimens as per established guidelines and local standards.

Specimens should be obtained before antimicrobial agents have been administered.

After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend the 31.28 g of the powder in 1000 mL purified / distilled water and mix thoroughly.
2. Boil with frequent agitation to dissolve the powder completely. DO NOT OVERHEAT.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Light yellow coloured, homogenous, free flowing powder.

Prepared Appearance: Light yellow to yellow coloured, clear to slightly opalescent gel forms in petridishes.

Cultural response: Cultural characteristics observed after an incubation at 35°C-37°C for 18-24 hours in presence of 3-5% CO₂.

Organism (ATCC)	Growth
<i>Lactobacillus fermentum</i> (9338)	Good
<i>Lactobacillus leichmannii</i> (4797)	Good
<i>Lactobacillus rhamnosus</i> (9595)	Good
<i>Lactobacillus plantarum</i> (8014)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Balows A., Truper H. G., Dworkin M., Harder W., Schleifer K. H., (Eds.), The Prokaryotes, 2nd Edi, 1992, Springer-Verlag
2. Wiseman R. F, Sarles W. B, Benton D. A, Harper A. E and Elvehjem C.A., 1956, J. Bacteriol., 72:723.
3. Ellis R. F. and Sarles W. B., 1958, J. Bacteriol., 75:272.
4. Rogosa M. and Sharpe M. E., 1960, J. Gen. Microbiol., 23:197
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.
7. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201160230500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
