PRODUCT SPECIFICATION SHEET

Glucose Yeast Extract Agar (DM432)

Intended Use

Glucose Yeast Extract Agar (DM432) is recommended for enumeration and cultivation of *Lactobacilli* in pharmaceutical preparations.

Product Summary and Explanation

Lactobacilli are a major part of the lactic acid bacteria group, named as such because most of its members convert lactose and other sugars to lactic acid. Glucose Yeast Extract Agar is prepared according to the formula described by Evans and Niven[1] and Rogosa et al[2] and is used for enumeration and cultivation of Lactobacilli in pharmaceutical preparations.

Principles of the Procedure

Glucose Yeast Extract Agar contains a variety of salts like sulphates, phosphates to support the growth of Lactobacilli. Peptic digest of animal tissue and yeast extract provides the necessary nitrogenous nutrients required for growth of Lactobacilli. Glucose is the source of fermentable carbohydrate and energy. The metallic salts are sources of ions essential for the replication of lactic acid bacteria.

Formula / Liter

Ingredients	Gms / Liter
Peptic digest of animal tissue	5.00
Yeast extract	5.00
Glucose	2.00
Monopotassium phosphate	0.50
Dipotassium phosphate	0.50
Magnesium sulphate	0.30
Sodium chloride	0.01
Manganese sulphate	0.01
Zinc sulphate	0.0016
Copper sulphate	0.0016
Cobalt sulphate	0.0016
Agar	15.00
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

Directions

1. Suspend 28.32 grams of the medium in one liter of distilled water.
2. Heat to boiling, to dissolve the medium completely.
3. Autoclave at 121°C, 15 psi pressure, for 15 minutes / validated cycle.
4. Mix well and pour into sterile Petri plates.

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Quality Control Specifications

Dehydrated Appearance	Light yellow to beige homogeneous free flowing powder
Prepared Medium	Yellow coloured, clear to slightly opalescent gel forms in Petri plates
Reaction of % Solution	Not Applicable
Gel Strength	Firm, comparable with 1.5% Agar gel

Expected Cultural Response : Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.

Sr. No.	Organisms	Results to be achieved		
		Inoculum (CFU)	Growth	Recovery
1.	*Lactobacillus acidophilus ATCC 4356*	50-100	good-luxuriant	>=50%
2.	*Lactobacillus bulgaricus ATCC 11842*	50-100	good-luxuriant	>=50%
3.	*Lactobacillus casei ATCC 9595*	50-100	good-luxuriant	>=50%

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure
Refer appropriate references for specific test procedures.

Results
Refer appropriate references and test procedures for interpretation of results.

Storage
Store the sealed bottle containing the dehydrated medium at 10 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light.

Expiration
Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if the appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedure
1. For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification.
2. Consult appropriate texts for detailed information and recommended procedures.

Packaging
Product Name : Glucose Yeast Extract Agar
Product Code : DM432
Available Pack sizes : 100gm / 500gm

References

1. Evans and Niven, 1951, J. Bacteriol., 62:599.
2. Rogosa M., Mitchell J. A. and Wiseman R. F., 1951, J. Bacteriol., 62 :132.

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3. Seppo Salminen, Atte von Wright and Arthur Ouweh and, Lactic Acid Bacteria., Microbiological and Functional Aspects, 3rd Ed., Marcel and Dekker. NY. Basel.

Further Information

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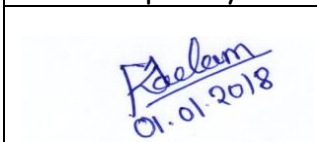	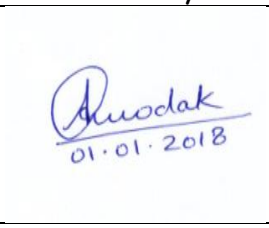	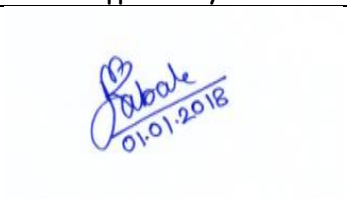
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