

PRODUCT SPECIFICATION SHEET



*Fungobiotic Agar/Mycobio Agar (DM113)

Intended Use

Fungobiotic Agar/Mycobio Agar (DM113) is used for the selective isolation of pathogenic fungi from clinical materials.

Product Summary and Explanation

The value of selective media for initial cultivation of pathogenic fungi has been demonstrated by numerous investigators.⁽¹⁻³⁾ Historically, media for fungi generally relied on an acid pH to make the media less suitable for growth of many bacteria.⁽⁴⁾ Recently developed media use neutral or slightly alkaline reactions, antibiotics, bile salts, and dyes as selective agents against bacteria.^(5,6) Mycobiotic Agar is an excellent basal medium and antifungal agents, cycloheximide and chloramphenicol, are added to study their affect on fungi. This medium is proven useful in the isolation of dermatophytes and other pathogenic fungi from clinical specimens.⁽⁷⁾

George recommends the use of Mycobiotic Agar exclusively for isolating dermatophytes (dermatophytes are not sensitive to cycloheximide or chloramphenicol) and in parallel to media without antibiotics for isolating fungi which cause systemic disease.⁽⁸⁾

Principles of the Procedure

The nitrogen, vitamin, and carbon sources are provided by Enzymatic Digest of Soybean Meal in Mycobiotic Agar. Dextrose is the carbohydrate source. Cycloheximide suppresses the growth of saprophytic fungi. Chloramphenicol inhibits bacterial growth. Agar is the solidifying agent.

Formula / Liter

Ingredients	Gms / Litre
Enzymatic Digest of Soybean Meal	10.00
Dextrose.	10.00
Agar	15.00
Cycloheximide	0.50
Chloramphenicol	0.05
Final pH: 6.5 ± 0.2 at 25°C	
Formula may be adjusted and/or supplemented as required to meet performance specifications	

Precautions

1. For Laboratory Use only.
2. TOXIC. Toxic if swallowed, inhaled, or absorbed through the skin. Irritating to eyes, respiratory system, and skin. Possible risk of harm to unborn child. Possible carcinogen.

Directions

1. Suspend 35.55 g of the medium in one liter of distilled water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C, 15 psi pressure, for 10 minutes.
4. Cool the tubes in a slanted position.
5. DO NOT REMELT OR OVERHEAT THE MEDIUM.

Quality Control Specifications

Dehydrated Appearance	Cream to yellow colored, homogeneous, free flowing powder
Solution	3.55% Solution in Distilled or deionized water is soluble on boiling, light to medium amber colored, and very slightly to slightly opalescent.
Prepared Medium	Light to medium amber colored slightly opalescent Gel



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Reaction of 3.55% Solution	pH 6.5 ± 0.2 at 25°C
Gel Strength	Firm, compared to 1.5% Agar Gel.

Expected Cultural Response: Cultural response on Mycobiotic Agar at 25 - 30°C after 4 - 7 days of incubation.

Sr. No.	Organisms	Results to be achieved	
		Inoculum (CFU)	Growth
1.	<i>Aspergillus brasiliensis</i> ATCC 16404	>=10 ³	inhibited
2.	<i>Candida albicans</i> ATCC 10231	50 -100	luxuriant
3.	<i>Candida tropicalis</i> ATCC1369	>=10 ³	inhibited
4.	<i>Escherichia coli</i> ATCC25922	>=10 ³	inhibited
5.	<i>Staphylococcus epidermidis</i> ATCC 12228	>=10 ³	inhibited
6.	<i>Trichophyton equinum</i> ATCC 22443	50 -100	luxuriant
7.	<i>Trichophyton verrucosum</i> ATCC 36058	50 -100	luxuriant

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

Test Procedure

Refer to appropriate references for specific procedures on the isolation and identification of fungi.

Results

Examine the medium for growth and Refer to appropriate references and procedures for results.

Storage

Store the sealed bottle containing the dehydrated medium at 2 - 8°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. Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.
2. Non-selective fungal media should be used concurrently with selective media when isolating fungi due to the sensitivity of some strains to cycloheximide and chloramphenicol.⁽⁶⁾

Packaging

Product Name: Mycobio Agar

Product Code : DM113

Available Pack sizes : 100gm / 500gm

References

1. Am. J. Public Health. 1951. 41:292.
2. Bull. D. Inst. Sieroteropl., Melan. 1926. 5:173.
3. Am. Rev. Resp. Dis. 1967. 95:1041.
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6. Rev. Latinoam Microbiol. 1958. 1:125.



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7. Land, G. A. 1992. Culture media. In H. D. Isenberg, (ed.). Clinical microbiology procedures handbook, vol. 1. American Society for Microbiology, Washington, D.C.
8. Georg, L. K., E. S. McDonough, L. Ajello, and S. Brinkman. 1960. In vitro effects of antibiotics on yeast phase of *Blastomyces dermatitidis* and other fungi. J. Lab. & Clin. Med. 55:116-19.

Further Information

For further information please contact your local MICROMASTER Representative.



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DM113PSS,QAD/FR/024,Rev.00

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