FUNGISEL AGAR (7205)

Intended Use
Fungisel Agar is used for the selective isolation of pathogenic fungi from clinical materials.

Product Summary and Explanation
Fungisel Agar contains Cycloheximide and Chloramphenicol. These antibiotics selectively inhibit saprophytic fungi and bacteria while allowing pathogenic fungi to grow. Adding antimicrobial agents to media for the isolation of pathogenic fungi is well documented.[1,2,3]

Selective fungal media are recommended for the isolation of dermatophytes, because these pathogens are not sensitive to Cycloheximide or Chloramphenicol.[4]

Principles of the Procedure
Enzymatic Digest of Soybean Meal provides the nitrogen and vitamin source required for organism growth in Fungisel Agar. Dextrose is included as an energy source. Cycloheximide and Chloramphenicol are used to restrict the growth of bacteria and commensal yeast. Agar is the solidifying agent.

Formula / Liter
Enzymatic Digest of Soybean Meal ..... 10 g
Dextrose..... 10 g
Cycloheximide..... 0.4 g
Chloramphenicol..... 0.05 g
Agar ..... 15.5 g
Final pH: 6.9 ± 0.2 at 25°C
Formula may be adjusted and/or supplemented as required to meet performance specifications.

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

Directions
1. Suspend 36 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes. DO NOT OVERHEAT.

Quality Control Specifications
Dehydrated Appearance: Powder is homogeneous, free flowing, and beige.

Prepared Appearance: Prepared medium is trace to slightly hazy, and light to medium yellow.

Expected Cultural Response: Cultural response on Fungisel Agar at 30°C after 2 – 7 days of incubation.

Microorganism	Approx. Inoculum (CFU)	Expected Results
Aspergillus niger ATCC® 16404	Point Inoculation	Partial to complete inhibition
Candida albicans ATCC® 10231	10 - 300	Growth
Escherichia coli ATCC® 25922	10^3	Inhibited
Trichophyton mentagrophytes ATCC® 9533	Point Inoculation	Growth

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

Test Procedure
Consult appropriate references for recommended test procedures.

Results
Refer to appropriate references and procedures for results.

Storage
Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

Expiration
Refer to the expiration date stamped on the container. The dehydrated medium should be discarded if it is 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. Antimicrobial agents incorporated into a medium to inhibit bacteria may also inhibit certain pathogenic fungi. Primary isolation should include the use of both non-selective and selective media.[3]
3. Antibiotic-containing media should be incubated at room temperature. Additional procedures may be required for complete identification of pathogenic fungi and yeasts.

Packaging

Fungisel Agar	**Code No.**	**7205A**	**500 g**
		7205B	**2 kg**
		7205C	**10 kg**

References

1. **Georg, L. K., L. Ajello, and C. Papageorge.** 1954. Use of cycloheximide in the selective isolation of fungi pathogenic to man. J. Lab Clin. Med., **44**:422-428.
2. **Murray, P.R., E. J. Baron, M. A. Pfaller, F. C. Tenover, and R. H. Yolken (eds.).** 1995. Manual of clinical microbiology, 6th ed. American Society for Microbiology, Washington, D.C.
3. **MacFaddin, J. F.** 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol.1. Williams & Wilkins, Baltimore, MD.
4. **Georg, L. K., L. Ajello, E. S. McDonough, and S. Brinkman.** 1960. In vitro effects of antibiotics on yeast phase of *Blastomyces dermatitidis* and other fungi. J. Lab & Clin. Med. **55**:116-119.

Technical Information
Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006
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