

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.....	40 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. VERY TOXIC. Toxic by inhalation and if swallowed. Possible risk of irreversible effects. Possible risk of harm to the unborn child.

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 clear to trace hazy, and light to medium yellow.

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

Microorganism	Response
<i>Aspergillus niger</i> ATCC® 16404	partial to complete inhibition
<i>Candida albicans</i> ATCC® 10231	growth
<i>Escherichia coli</i> ATCC® 25922	inhibited
<i>Trichophyton mentagrophytes</i> ATCC® 9533	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. Tenover (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 (410)780-5120 or fax us at (410)780-5470.