



### Fungobiotic Agar (Mycobio Agar)

M475

#### Intended Use:

Recommended for isolation of dermatophytes and other pathogenic fungi from clinical samples.

#### Composition\*\*

Ingredients	g / L
Soya peptone	10.000
Dextrose (Glucose)	10.000
Cycloheximide	0.500
Chloramphenicol	0.050
Agar	15.000
Final pH ( at 25°C)	6.5±0.2

\*\*Formula adjusted, standardized to suit performance parameters

#### Directions

Suspend 35.55 grams in 1000 ml purified / distilled water. Heat to boiling to dissolve the medium completely. Distribute in tubes or flasks. Sterilize by autoclaving at 15 lbs pressure (121°C) for 10 minutes. Cool the tubes to 45-50°C in a slanted position. **DO NOT REMELT OR OVERHEAT THE MEDIUM.**

**Warning:** Cycloheximide is very toxic. Avoid skin contact or aerosol formation and inhalation.

#### Principle And Interpretation

Fungi that multiply on skin are called dermatophytes. Dermatophytosis is a general term for mycotic parasitism of the skin. These can be isolated on differential selective media containing generous amounts of glucose and antibiotics to suppress bacterial growth (1).

Fungobiotic Agar is used for isolation of pathogenic fungi from mixed microbial flora. Georg et al (2) recommended addition of two antibiotics cycloheximide and chloramphenicol for the primary isolation of dermatophytes and fungi which cause systemic disease as none of the dermatophytes are sensitive to these antibiotics but some fungi causing systemic disease may be inhibited by one or the other antibiotic (3). For this reason media without antibiotics must be used in parallel with Fungobiotic Agar.

Soya peptone and dextrose provide essential nutrients for fungal growth. Cycloheximide inhibits saprophytic fungi, certain yeasts and moulds (4,5) while chloramphenicol has an inhibitory action on the accompanying bacteria (6,7). Temperature of incubation affects the sensitivity of certain systemic pathogenic fungi to cycloheximide and chloramphenicol (8). It is therefore recommended that incubation should be carried out at 25-30°C.

#### Type of specimen

Clinical samples - Skin samples

#### Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (9,10).

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

#### Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

#### Limitations :

1. It is recommended that incubation should be carried out at 25-30°C.
2. Individual organisms differ in their growth requirement and may show variable growth patterns on the medium.
3. Each lot of the medium has been tested for the organisms specified on the COA. It is recommended to users to validate the medium for any specific microorganism other than mentioned in the COA based on the user's unique requirement.
4. Further biochemical and serological tests must be performed for confirmation.

## Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

### Quality Control

#### Appearance

Cream to yellow homogeneous free flowing powder

#### Gelling

Firm, comparable with 1.5% Agar gel

#### Colour and Clarity of prepared medium

Medium amber coloured, clear to slightly opalescent gel forms in tubes as slants

#### Reaction

Reaction of 3.5% w/v aqueous solution at 25°C. pH : 6.5±0.2

#### pH

6.30-6.70

#### Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 4-7 days .

Organism	Inoculum (CFU)	Growth
# <i>Aspergillus brasiliensis</i> ATCC 16404 (00053*)	≥10 <sup>4</sup>	inhibited
<i>Candida albicans</i> ATCC 10231 (00054*)	50-100	luxuriant
<i>Candida tropicalis</i> ATCC 1369	≥10 <sup>4</sup>	inhibited
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 <sup>4</sup>	inhibited
<i>Staphylococcus epidermidis</i> ATCC 12228 (00036*)	≥10 <sup>4</sup>	inhibited
<i>Trichophyton equinum</i> ATCC 22443	50-100	luxuriant
<i>Trichophyton verrucosum</i> ATCC 36058	50-100	luxuriant

Key : \* Corresponding WDCM numbers, # Formerly known as *Aspergillus niger*.

### Storage and Shelf Life

Store dehydrated and the prepared medium at 15-25°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

### Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (9,10).

### Reference

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## Packaging

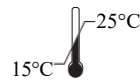
M475-100G - Fungobiotic Agar (Mycobio Agar)



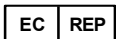
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