

## **Fungobiotic Agar (Mycobio Agar)**

### **Intended Use**

Fungobiotic Agar (Mycobio Agar) is recommended for the isolation of dermatophytes and many other pathogenic fungi.

### **Typical Composition (g/litre)**

Papaic digest of soyabean meal 10.0 ; Dextrose 10.0 ; Cycloheximide 0.500 ; Chloramphenicol 0.050 ; Agar 15.0

### **Mode of Action**

Fungobiotic Agar is used for isolation of pathogenic fungi from mixed microbial flora. Papaic digest of soyabean meal and dextrose provide essential nutrients for fungal growth. Cycloheximide inhibits saprophytic fungi, certain yeasts and moulds while chloramphenicol has an inhibitory action on the accompanying bacteria. Temperature of incubation affects the sensitivity of certain systemic pathogenic fungi to cycloheximide and chloramphenicol. It is therefore recommended that incubation should be carried out at 25-30°C.

### **Preparation**

Suspend 35.55 grams in 1 liter 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 in slanted position. DO NOT REMELT OR OVERHEAT THE MEDIUM.

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

Final pH ( at 25°C) 6.5±0.2

### **Storage**

Store between 15-25°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

### **Experimental Procedure and Evaluation**

Fungobiotic Agar is used for isolation of pathogenic fungi from mixed microbial flora. Georg et al. 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. For this reason media without antibiotics must be used in parallel with Fungobiotic Agar.

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

## Quality Control

Organism	Inoculum	Growth
Aspergillus brasiliensis ATCC 16404	$\geq 10^3$	Inhibited
Candida albicans ATCC 10231	50 -100	Luxuriant
Candida tropicalis ATCC 1369	$\geq 10^3$	Inhibited
Escherichia coli ATCC 25922	$\geq 10^3$	Inhibited
Staphylococcus epidermidis ATCC 12228	$\geq 10^3$	Inhibited
Trichophyton equinum ATCC 22443	50 -100	Luxuriant
Trichophyton verrucosum ATCC 36058	50 -100	Luxuriant

## Reference

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5. Robinson, Coken, Robinson and Bereston, 1956, J. Am. Med. Assoc.
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