

## TM 1542 – FUNGOBIOTIC AGAR (MYCOBIO AGAR)

### INTENDED USE

For isolation of dermatophytes and other pathogenic fungi.

### PRODUCT SUMMARY AND EXPLANATION

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.

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.

### COMPOSITION

| Ingredients                    | Gms / Ltr |
|--------------------------------|-----------|
| Papaic digest of soyabean meal | 10.000    |
| Dextrose                       | 10.000    |
| Cycloheximide                  | 0.500     |
| Chloramphenicol                | 0.050     |
| Agar                           | 15.000    |

### PRINCIPLE

The medium consists of Papaic digest of soyabean meal and dextrose which 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.

### INSTRUCTION FOR USE

- Dissolve 35.55 grams in 1000 ml purified/distilled water containing 5 ml glycerol.
- Heat to boiling to dissolve the medium completely.
- Distribute in tubes or flasks. Sterilize by autoclaving at 15 psi pressure (121°C) for 10 minutes.
- Cool the tubes in a slanted position. DO NOT REMELT OR OVERHEAT THE MEDIUM.

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

### QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
- Appearance of prepared medium** : Medium amber coloured, clear to slightly opalescent gel forms in tubes as slants.
- pH (at 25°C)** : 6.5 ± 0.2

### INTERPRETATION



Cultural characteristics observed after incubation.

| Microorganism                     | ATCC  | Inoculum (CFU/ml) | Growth    | Incubation Temperature | Incubation Period |
|-----------------------------------|-------|-------------------|-----------|------------------------|-------------------|
| <i>Aspergillus brasiliensis</i>   | 16404 | $\geq 10^3$       | Inhibited | 25-30°C                | 4- 7 Days         |
| <i>Candida albicans</i>           | 10231 | 10-100            | Luxuriant | 25-30°C                | 4- 7 Days         |
| <i>Candida tropicalis</i>         | 1369  | $\geq 10^3$       | Inhibited | 25-30°C                | 4- 7 Days         |
| <i>Escherichia coli</i>           | 25922 | $\geq 10^3$       | Inhibited | 25-30°C                | 4- 7 Days         |
| <i>Staphylococcus epidermidis</i> | 12228 | $\geq 10^3$       | Inhibited | 25-30°C                | 4- 7 Days         |
| <i>Trichophyton equinum</i>       | 22443 | 10-100            | Luxuriant | 25-30°C                | 4- 7 Days         |
| <i>Trichophyton verrucosum</i>    | 36058 | 10-100            | Luxuriant | 25-30°C                | 4- 7 Days         |

#### PACKAGING:

In pack size of 100 gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL













After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

1. Norton C. F., 1986, Microbiology, 2nd Ed., Addison-Wesley Publishing Company
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3. Georg et al, 1954, J. Lab. and Clin. Med., 42:422.



4. Leach, Ford and Whitten, 1947, J. Am. Chem. Soc., 69:474.
5. Whitten, 1948, J. Bacteriol., 56:283.
6. Cooke, 1954, Antibiotics and Chemother., 4:657.
7. Robinson, Coken, Robinson and Bereston, 1956, J. Am. Med. Assoc., 16 0:537.
8. McDonough et al, 1960, Mycopath et. Mycolog. Appl., 13:113.

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| <br><b>GMP</b><br>Good Manufacturing<br>Practices Certified | <br><b>IVD</b><br>For In Vitro Diagnostic Use  | <br><b>QTY.</b><br>Quantity    | <br><b>LOT/<br/>B. NO.</b><br>Lot / Batch Number | <br><b>REF</b><br>Catalogue Number           | <br><b>Manufacturer</b> |
| <br><b>Temperature Unit</b>                                 | <br><b>EC REP</b><br>Authorized Representative<br><small>MedNet GmbH<br/>Barkstrasse 10,<br/>48163 Moenster, Germany</small> | <br><b>European Conformity</b> | <br><b>QR<br/>Code</b>                           | <br><b>Consults Instructions<br/>for Use</b> | <br><b>Best Before</b>  |

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
**Revision: 08 Nov., 2019**