

CM 21,268 - MYCOBIOTIC AGAR

INTENDED USE

For the selective isolation and cultivation of 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

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.

INSTRUCTION FOR USE

Dissolve 35.55 grams in 1000 ml distilled water.

Heat to boiling to dissolve the medium completely.

Distribute in tubes or flasks and 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 an incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Aspergillus brasiliensis	16404	$\geq 10^3$	Inhibited	0%	25-30°C	4-7 days
Candida albicans	10231	10-100	Luxuriant	$\geq 70\%$	25-30°C	4-7 days
Candida tropicalis	1369	$\geq 10^3$	Inhibited	0%	25-30°C	4-7 days
Escherichia coli	25922	$\geq 10^3$	Inhibited	0%	25-30°C	4-7 days
Staphylococcus epidermidis	12228	$\geq 10^3$	Inhibited	0%	25-30°C	4-7 days
Trichophyton equinum	22443	10-100	Luxuriant	$\geq 70\%$	25-30°C	4-7 days
Trichophyton verrucosum	36058	10-100	Luxuriant	$\geq 70\%$	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 2-8°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

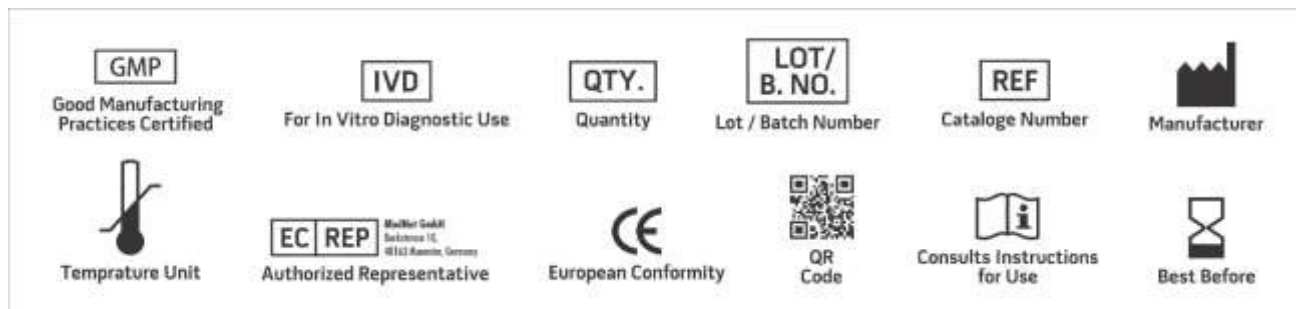
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Norton C.F., 1986, Microbiology, 2nd Ed., Addison-Wesley Publishing Company



2. Georg et al, 1960, J. Lab. and Clin. Med., 55:116.
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.



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

*For LabUse Only