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Product Information

84886 Selective Agar for pathogenic fungi

For the isolation of pathogenic fungi, in particular dermatophytes, from heavily contaminated material.

Composition:

Ingredients	Grams/Litre
Soya flour peptone	10.0
D(+)-Glucose	10.0
Cycloheximide	0.4
Chloramphenicol	0.05
Agar	12.5
Final pH 6.9 +/- 0.2 at 25°C	

Prepared media should be stored protected from direct light below 8°C. Dehydrated powder should be stored in a dry place at 2-25°C. After first opening of the bottle the content can be used up to expiry date when stored dry and tightly closed at 15 to 25°C.

Appearance:	Slightly brown powder.
Gelling:	Firm
Color and Clarity:	Slightly brownish yellow and clear

Directions:
Dissolve 33 g in 1 litre distilled water. Heat to boiling to dissolve the medium completely. Do not overheat. DO NOT AUTOCLAVE. Cool to 45-50°C and pour into sterile petri dishes. Do not reliquidize once the medium is solid.

Principle and Interpretation:
Cycloheximide is an agent that allows to select dermatophytes from other fungi (2,3). Choramphenicol largely suppresses bacteria. Certain pathogenic fungi may also sometimes be inhibited, therefore there should be a parallel inoculation of a culture medium without inhibitors. Taplin (6) recommends the addition of 40 mg gentamicin sulfate/litre (e.g. G4793) to suppress chloramphenicol-resistant bacteria, which can occasionally be present. Soya flour peptone supplies carbon, nitrogen and other essential growth nutrients, while glucose is used as carbohydrate energy source.

Sample material must be taken by an appropriate method and inoculated on the surface of the culture medium.
Incubation: up to 3 weeks at approximately 28°C (room temperature); if endomycoses are suspected to be present, also at 35°C.
Any fungal colonies found after incubation can be used for identification (5) or can be further cultivated on inhibitor-free media (e.g. Sabouraud media) for further differentiation.

Cultural characteristics after 24 hours at 37°C.

Organisms (ATCC)	Growth
Trichophyton mentagrophytes (18748)	+++
Trichophyton rubrum (28188)	++
Microsporum gallinae (12108)	++
Trichophyton ajelloi (28454)	++
Microsporum canis (36299)	+++
Geotrichum candidum (DSM 1240)	+++
Candida albicans (10231)	+++
Aspergillus niger (16404)	- (+)
Penicillium commune (10428)	- (+)
Bacillus cereus (11778)	-

References:

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2. Georg, L.K., 1953, Use of cycloheximide medium for isolation of dermatophytes from clinical materials. - Arch. Dermat. Syphil., 67; 355-361
3. Georg L.K., Ajello D. and. Papageorge C., 1953, Use of cycloheximide in the selective isolation of fungi pathogenic to man. - J. Lab. Clin. Med., 44; 422-428
4. Haley L.D., 1969, Laboratory Methods in Systematic Mycoses (C.D.C. Course 8170-C, Atlanta).
5. McDonough E.S., Georg L.K., Ajello L. and Brinkman S., 1960, Growth of dimorphic human pathogenic fungi on media containing cycloheximide and chloramphenicol. - Mycopath. Mycol. Appl., 13; 113-120
6. Taplin D., 1965, The use of gentamicin in mycology. - J. Invest. Dermat., 45; 549-550

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.