

IVD in vitro diagnosticum - For professional use only



Selective Agar for Pathogenic Fungi

Selective agar for pathogenic fungi

Cat. No. 1.05467.0500
(500 g)

Merckoplate® Selective agar for pathogenic fungi

Cat. No. 1.10415.0001
(20 plates)

For the isolation of pathogenic fungi, particularly dermatophytes, from heavily contaminated sample material.

See also General Instruction of Use

Warnings and precautions see www.merck-chemicals.com

Principle

Microbiological method

Mode of Action

Cycloheximide is used to select for dermatophytes (GEORG 1953; GEORG et al. 1954). Chloramphenicol largely suppresses bacteria. Certain pathogenic fungi may also sometimes be inhibited, therefore a culture medium devoid of inhibitors should be inoculated as well. TAPLIN (1965) recommends addition of 40 mg gentamicin sulfate/litre (e.g. 0.5 ml gentamicin solution/litre), to suppress chloramphenicol-resistant bacteria, which are occasionally present.

Typical Composition (g/litre)

Peptone from soymeal 10.0; D(+)-glucose 10.0; cycloheximide 0.4; chloramphenicol 0.05; agar-agar 12.5.

Preparation and Storage

Cat. No. 1.05467. Selective Agar for Pathogenic Fungi (500 g)

Usable up to the expiry date when stored dry and tightly closed at +15 to +25°C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25°C.

Suspend 33 g/litre completely, pour plates.

pH: 6.9 ± 0.2 at 25 °C.

The plates are clear and yellowish-brown.

■ **Do not autoclave, do not overheat. Avoid reliquefaction.**

Cat. No. 1.10415.0001 Merckoplate® Selective Agar for Pathogenic Fungi (20 plates, 20 ml each)

Ready-to-use

Usable up to the expiry date when stored at +12 to +15°C.

The plates are clear and yellowish-brown.

Specimen

e.g. Nails, hair, skin.

Clinical specimen collection, handling and processing, see general instructions of use.

Experimental Procedure and Evaluation

Obtain the sample material by an appropriate method and inoculate 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, at 35 °C as well.

Any fungal colonies which develop can be identified as such (MCDONOUGH et al. 1960) or can be inoculated on media which do not contain inhibitors (e.g. SABOURAUD media) for further differentiation.

Quality control

<i>Test strains</i>	<i>Growth</i>
Trichophyton mentagrophytes ATCC 18748	good / very good
Trichophyton rubrum ATCC 28188	fair / good
Microsporum gallinae ATCC 12108	fair / good
Trichophyton ajelloi ATCC 28454	fair / good
Microsporum canis ATCC 36299	good / very good
Geotrichum candidum DSM 1240	good / very good
Candida albicans ATCC 10231	good / very good
Aspergillus brasiliensis (formerly A. niger) ATCC 16404	none / poor
Penicillium commune ATCC 10428	none / poor
Bacillus cereus ATCC 11778	none

Additives

Merck Cat.No.	Product	Pack Size
1.11977.0001	Gentamicin solution	10 ml



Microsporum spp.

Literature

- AHEARN, D.G.: Systematics of Yeasts of Medical Interest (Pan American Health Organization: International Symposium on Mycoses). - **205**; 54-70 (1970).
- GEORG, L.K.: Use of cycloheximide medium for isolation of dermatophytes from clinical materials. - **Arch. Dermat. Syphil.**, **67**; 355-361 (1953).
- GEORG, L.K., AJELLO, D. a. PAPAGEORGE, C.: Use of cycloheximide in the selective isolation of fungi pathogenic to man. - **J. Lab. Clin. Med.**, **44**; 422-428 (1954).
- HALEY, L.D.: Laboratory Methods in Systematic Mycoses (C.D.C. Course 8170-C, Atlanta, 1969).
- MCDONOUGH, E.S., GEORG, L.K., AJELLO, L., a. BRINKMAN, S.: Growth of dimorphic human pathogenic fungi on media containing cycloheximide and chloramphenicol. - **Mycopath. Mycol. Appl.**, **13**; 113-120 (1960).
- TAPLIN, D.: The use of gentamicin in mycology. - **J. Invest. Dermat.**, **45**; 549-550 (1965).

