

## PRODUCT DESCRIPTION

Id-Fungi Plates™ (Id-FP) is a medium used for the cultivation of molds, yeasts and dermatophytes from clinical samples. The Id-Fungi Plates+™ (Id-FP+) medium is a selective medium used for the isolation of dermatophytes from clinical samples. A transparent membrane, allows the growth of fungi on the surface area of the medium.

## PRINCIPLE:

The presence of antibiotic, low pH of agar, the presence of growth factors and high amount of sugar in **Id-Fungi Plates** are specially designed to promote the growth of fungi and limit bacterial growth. The membrane limits mold growth into agar while leaving disseminate nutrient sources (carbon, nitrogen...). These media are used to isolate fungal species from clinical or environmental samples. The presence of cycloheximide, an antibiotic and a low pH of **Id-Fungi Plates+** limit the growth of bacteria but also many filamentous fungi and *Candida* species. The membrane limits the growth of fungi in agar while leaving disseminate nutrient sources (carbon, nitrogen ...). These media are used to isolate dermatophytes from clinical samples.

## REAGENTS:

Id-FP: This medium can be adjusted and / or supplemented as required to meet performance criteria, it contains chloramphenicol, a bacteriostatic antibiotic belonging to amphenicol family and a polypropylene membrane. pH of Id-FP is set around 5.4 and 5.7.

## Id-FP do not contain any other known harmful and / or dangerous substance.

Id-FP+: This medium can be adjusted and / or supplemented according to the performance criteria imposed; it contains in particular chloramphenicol, bacteriostatic antibiotic of the phenicol family, as well as a polypropylene membrane. The pH of Id-FP was set between 5.4 and 5.7. In addition Id-FP+ contain cycloheximide, a chemical compound that inhibits protein biosynthesis, it is used in Id-FP+ as an antifungal.

**Id-FP+ do not contain any other known harmful and / or dangerous substances.**

## PRESENTATION:

Medium ready to use: box of 20 agar

REF: ID01: 1 box of 20 agar

REF: ID01 +: 1 box of 20 agar

## STORAGE and EXPIRACY:

Upon receipt, the Id-Fungi Plates™ and Id-FP+ must be stored between 2°C C and 8°C in the dark in the original packaging, until their use. Do not freeze or overheat.

Agar Id-Fungi Plates™ are suitable up to 5 months after their manufacture date if storage conditions are respected and agar are incubated for the recommended time. Agar from an opened bag of 10 Id-FP can be used up to one week after aperture when stored between 2°C and 8 ° C in a clean area.

Agar Id-Fungi Plates+™ are suitable up to 5 months after their manufacturing date if the storage conditions are respected and the plates are incubated for the recommended time. Agar from an opened bag of 10 Id-FP+ can be used up to one week after aperture when stored between 2°C and 8 ° C in a clean area.

## PRECAUTIONS:

### For professional use only

Do not use Id-FP / Id-FP+ that shows evidence of microbial contamination, discoloration, drying, cracking or any other type of deterioration.

Handle appropriately samples according to good laboratory practice aseptic techniques in force and the handling precautions for microbial treatment group.

Before use to ensure the integrity of the petri dish, the culture medium and the membrane. This product is for single use only.

## WHEN TO USE THE ID-FP:

### Package contents:

Id-Fungi Plates  
Id-Fungi Plates +

### Material not included

Auxiliary culture Medium, laboratory reagents and equipment required.

#### a. Purification:

With loop gently pick the colony of interest and set it to the center of the agar; it is also possible to produce a plug with a scalpel at the youngest part and to set it to the center of the agar.

#### b. Culture of a sample (first intention):

Place the sample directly on the center of the agar.

*Alternative 1:* Realize exhaustion streaks being careful to stay on the membrane.

*Alternative 2:* set spots of the sample in several places agar taking care to remain on the membrane.

#### c. Subcultures:

With a dry swab or a sterile loop take the sample - it is also possible to produce a plug (scalpel) at the youngest part - have the sample in the center of the agar.

Then, incubate between 20°C to 37°C.

Reading the results between 24 to 96 hours depending on the identification method (MALDI-TOF / Macroscopic-Microscopic Observations / Molecular Biology) and the species.

## RESULTS:

After incubation observe microbial growth.

The identification of targeted microorganism (s) must be achieved through direct examination by macro and microscopic observations and / or additional tests (Maldi-Tof / Biochemical / Immunological / Molecular Biology).

## PERFORMANCE AND QUALITY CONTROL OF ID-FUNGI PLATES

Medium performances are checked for each batch with the following strains:

- *Candida.albicans* ATCC 10231 48-72 20-25 ° C
- *Aspergillus.brasiliensis* ATCC 16404 48-72h 20-25°C
- *Trichophyton.rubrum* IP 1464.83 5 Days 37°C

Inhibition of bacterial growth is checked with the strain:

- *Escherichia.coli* ATCC 8739 48-72h 25°C

## The Id-FP performance was evaluated from two types of samples.

### 1. fungal species collection

Of more than 21 species of fungal environmental or clinical interest:

*Penicillium* (2), *Aspergillus* (4), *Fusarium* (1), *Alternaria* (2), *Cladosporium* (2), *Trichoderma* (1), *Mucorales* (2), *Stachybotris* (1), *Yeasts* (2), *Dermatophytes* (5) ...

### 2. fungal species from clinical specimens

## See clinical studies, Bibliography

*Penicillium* (+18), *Aspergillus* (+91), *Fusarium* (+15), *Trichoderma* (1), *Mucorales* (+11), *Levures* (+2), *Dermatophytes* (102), autres souches d'intérêt clinique (+59) ...

**Environmental strains:** Growth observed from 24 h incubation at 25 ° C.

**Clinical strains:** Growth observed from 24h incubation between 30 and 37 ° C.

**Yeasts:** growth observed from 24 hours of incubation at 25 ° C.

**Dermatophytes:** growth observed between 48-72h incubation at 25 ° C.

## PERFORMANCE CHARACTERISTICS AND LIMITATIONS OF THE PROCEDURE

The media presented in this document are standard media designed for isolation and cultivation of fungi from all types of clinical and non-clinical samples.

With the large range of temperatures in which the molds grow, it may be necessary to inoculate several plates of the same environment to incubate them at different temperatures. Consult the appropriate references.

## ECOTOXICOLOGY

### Chloramphenicol:

DL50:	1500mg/kg (oral mice)
	110mg/kg (i.v. mice)
	400mg/kg (s.c. mice)
	1100mg/kg (i.p. mice).

The amount of chloramphenicol presents in Id-FP and Id-FP+ is 150 times lower than the DL50 indicated above, orally.

### Cycloheximide:

DL50:	133mg/kg (oral souris)
	150mg/kg (i.v. souris)
	160mg/kg (s.c. souris)
	100mg/kg (i.p. souris)

The amount of cycloheximide presents in Id-FP and Id-FP+ is 13 times lower than the DL50 indicated above, orally.

## WASTE TREATMENT

Dispose of the reagents used and the biological and non biological material according to regulations.

## BIBLIOGRAPHIC REFERENCES

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LPAL Louisville (USA) 2019 scientific poster: The fungi ID Fungi plates and Mass spectrometry Complement Each Other to Facilitate mold identification. Bruker (Germany).

Performance of the new Id-Fungi plate using two types of reference libraries (Bruker and MSI) to identify fungi with the Bruker MALDI Biotyper. Laura Heireman<sup>a</sup>, Sofie Patteet<sup>b</sup>, Sophia Steyaert<sup>a</sup> 2020

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JJ Jr Rahal et MS Simberkoff, « Bactericidal and bacteriostatic action of chloramphenicol against meningial pathogens. », *Antimicrobial agents and chemotherapy*, vol. 16, no 1, 1979, p. 13-18 (PMID 38742, PMC352780)

AA Yunis, « Chloramphenicol toxicity: 25 years of research. », *The American journal of medicine*, vol. 87, n° 3N, 1989, p. 44N-48N ([PMID 2486534](#))

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Quantitative Evaluation of the Antifungal Properties of Cycloheximide<sup>1</sup> [Ira F. Salkin](#) and [Nancy Hurd](#)

Some observations on the acute histopathologic effects of cycloheximide in vivo. R. S. Verbin, D. S. Longnecker, H. Liang, and E. Farber

## PACKAGING:

## **Id-Fungi Plates:**

**Ref ID01:** environments in Petri dishes ready to use  
20 units

**Ref ID02:** environments in Petri dishes ready to use  
40 units

**Ref ID05:** environments in Petri dishes ready to use  
100 units

## **Id-Fungi + Plates with cycloheximide:**

**ID01 + Ref:** environments in Petri dishes ready to use  
20 units

**ID02 + Ref:** environments in Petri dishes ready to use  
40 units

**ID05 + Ref:** environments in Petri dishes ready to use  
100 units



CONIDIA SAS  
Parc d'activité en Chuel  
Route de Chasselay  
69650 QUINCIEUX  
[www.conidia.fr](http://www.conidia.fr)

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