

Introduction

Intended Use

InTray[®] DM-FungID™ is an enriched dermatophyte medium used to aid in the detection of dermatophytes from clinical specimens with mixed microbiota.

Description and Principle

Dermatophytes are fungi in the genera *Microsporum*, *Tricophyton* and *Epidermophyton*. They are capable of metabolizing keratin found in skin, hair and nails of living hosts. The fungi characteristically may invade the cutaneous tissue of the living host but rarely penetrate the subcutaneous tissue. *Tinea* and ringworm are two terms commonly used to describe dermatophytes.

InTray DM-FungID is formulated to produce a red color in the presence of growing dermatophytes. Moreover, the medium is formulated to produce distinctive colony growth with typical identifying characteristics both macro- and microscopically. The medium inhibits most gram-positive bacteria, gram-negative bacteria, yeast and saprophytic fungi. It is a single exposure system with dynamic built-in components and features that are designed for user compatibility and ease of detection.

Reagents and Appearance

This product appears transparent with a yellow hue and contains soytone, carbohydrate, growth stimulants, antimicrobial agents including: cycloheximide, color indicator and agar in distilled water. The final pH of the media is 5.6 ± 0.1 at 25°C.

Precautions, Safety and Disposal

For *In Vitro* Diagnostic Use. For professional use only.

Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing and gloves.

Once the tray has been inoculated and resealed, re-open only in a biological safety cabinet. Because of the potential for containing infectious materials, the tray must be destroyed by autoclaving at 121°C for 20 minutes.

Storage

Upon receipt, store InTray DM-FungID at 18-25°C. Avoid refrigeration, freezing or prolonged storage at temperatures greater than 40°C. Do not use an InTray DM-FungID if the medium shows signs of deterioration or contamination.

Shelf Life

InTray DM-FungID expires 27 months from the date of manufacture.

Procedure

Key notes regarding specimen collection: Specimen collection poses a major uncertainty in using this device.

NAILS - Often collecting viable material from infected nails is difficult because the living organisms are well under the nail itself. For best results, cut nails into small pieces.

HAIR - Samples should be grasped at the uninfected end and several (3-6) small pieces, about 2 cm long, should be cut from the infected portion for inoculation onto the medium.

SKIN - Scrapings should be taken with an inoculation tool that has been moistened with the medium or a sharp blade from the outer ridge of an active lesion. Vesicular fluid is unacceptable for dermatophyte culture. If vesiculated, skin scrapings should be taken from the surface.

Materials Provided

- InTray DM-FungID test(s)

Materials Required but Not Provided

- Sterile inoculation tool (e.g., cotton swab/forceps/scalpel blade)
- Laboratory incubator capable of incubation at 18-30°C

Prepare Sample:

Use aseptic technique during specimen collection and handling. Remove any soap residue from the sampling area. Clean the area with 70% alcohol and permit to air dry.

Collect Sample:

InTray DM-FungID is designed for culturing hair, skin and nail samples (i.e., cuttings/scrapings). All specimens should be handled according to CDC infectious materials isolation guidelines; [cdc.gov/infectioncontrol/guidelines/isolation](https://www.cdc.gov/infectioncontrol/guidelines/isolation)

1 Prepare InTray



Immediately label the tray with patient/sample information and date. Pull back the lower right corner adjacent to the clear window of the tray label until the protective seal is completely visible.

Remove the seal by pulling the tab. Discard the seal.

DO NOT REMOVE OR ALTER THE WHITE FILTER STRIP OVER THE VENT HOLE!

2 Inoculate Sample



Inoculate the specimen on the center surface of the medium. A sterile inoculating loop that has been moistened by touching the surface of the medium may be used for inoculation of solids or scrapings.

Re-seal all around the tray to ensure a complete seal by pressing the edges of the label against the plastic tray.

DO NOT COVER THE VIEWING WINDOW. Complete re-seal prevents dehydration!

Incubation

Incubate inoculated trays for up to 14 days at 18-30°C, in the dark. Observe the trays daily for color changes, through the clear viewing window.

Quality Control

This product has been tested and meets the CLSI (formerly NCCLS) Approved Standard for commercially prepared media (M22-A3). At the time of manufacture, quality control testing is performed on each lot of the InTray DM-FungID. The ability of the media to support growth and demonstrate expected biochemical reactions and morphology is verified by lot.

Recommended strains for QC testing of InTray DM-FungID

Test Strain	ATCC	Expected Result
<i>T. mentagrophytes</i>	9533	Growth
<i>T. rubrum</i>	28188	Growth
<i>T. tonsurans</i>	28942	Growth
<i>M. gypseum</i>	14683	Growth
<i>A. brasiliensis</i>	16404	Significant Inhibition
<i>S. aureus</i>	25923	Significant Inhibition
<i>E. coli</i>	25922	Significant Inhibition
<i>C. albicans</i>	60193	Significant Inhibition