



DTM / Sabouraud

Bi-plate for detection and cultivation of fungi from clinical and veterinary specimens.

DESCRIPTION

DTM / Sabouraud is a ready-to-use plate containing two distinct media used for the isolation and differentiation of yeasts and moulds.

Dermatophyte Agar (DTM) allows the selective growth of pathogenic dermatophytic fungi.

Sabouraud Dextrose Agar (SDA) is a non selective isolation medium supporting the growth and maintenance of pathogenic and non-pathogenic fungi. Its formula conforms to EN ISO 11133 and meets the criteria of the Harmonized Pharmacopoeia.

TYPICAL FORMULA

Dermatophyte Agar (DTM)	(g/l)	Sabouraud Dextrose Agar (SDA)	(g/l)
Enzymatic Digest of Soybean Meal	10.0	Pancreatic Digest of Casein	5.0
Dextrose	10.0	Peptic Digest of Animal Tissue	5.0
Phenol Red	0.2	Dextrose	40.0
Cycloheximide	0.5	Agar	15.0
Gentamicin	0.1	Final pH 5.6 ± 0.2 at 25°C	
Chloramphenicol	0.1		
Agar	20.0		
Final pH 5.5 ± 0.2 at 25°C			

METHOD PRINCIPLE

Enzymatic digest of soybean meal, pancreatic digest of casein and peptic digest of animal tissue provide amino acids, nitrogen, carbon, vitamins and minerals required for organisms growth. Dextrose is an energy source. Lactose is the fermentable carbohydrate. Agar is the solidifying agent.

In DTM, phenol red is the pH indicator. The selectivity is given by cycloheximide inhibiting most saprophytic moulds, gentamicin which suppresses Gram-negative bacteria including *Pseudomonas* spp and chloramphenicol that inhibits a wide range of Gram-positive and Gram-negative bacteria.

TEST PROCEDURE

Inoculate plates by streaking directly the sample onto the agar surface. Streak the specimen as soon as possible after it is received in the laboratory. Incubate aerobically at room temperature (15-30°C) for up to 14 days.

INTERPRETING RESULTS

Examine daily and observe for development of a red color change in the DTM medium. Pathogenic dermatophytes (*Epidermophyton*, *Microsporum*, and *Trichophyton* spp) typically produce alkaline metabolites and most of them will produce a color change in 3-6 days.

Growth, without a color change to red, indicates that the organism is probably not a dermatophyte. Further biochemical and/or serological testing is recommended for complete identification.

If growth appears on Sabouraud Dextrose Agar used as control medium and no growth appears on DTM, the organism is not a dermatophyte. Colonies with green or black hyphae are not typical of dermatophytes even though the media may turn red.

APPEARANCE

Dermatophyte Agar (DTM): clear, yellowish-orange.

Sabouraud Dextrose Agar (SDA): slightly opalescent, light amber.

STORAGE

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

6 months.

QUALITY CONTROL

Plates are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU.

Inoculum for selectivity: 10⁴-10⁶ CFU.

Incubation conditions: 25 ± 2°C for 2-7 days.

QC Table.

Microorganism		Growth on DTM	Growth on SDA
<i>Trichophyton mentagrophytes</i>	ATCC® 9533	Good, red medium	Good
<i>Candida albicans</i>	ATCC® 10231	Good, no color change in the medium	Good
<i>Aspergillus brasiliensis</i>	ATCC® 16404	Inhibited	Good
<i>Staphylococcus aureus</i>	ATCC® 25923	Inhibited	Partially to completely inhibited
<i>Escherichia coli</i>	ATCC® 25922	Inhibited	Partially to completely inhibited

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used by properly trained operators only.

DISPOSAL OF WAIST

Disposal of waste must be carried out according to national and local regulation in force.








BIBLIOGRAPHY

1. EN ISO 11133:2014. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. European Pharmacopoeia 6.5 (2009) 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms.
3. United States Pharmacopoeia 32 NF 27 (2009) <62> Microbiological examination of non-sterile products: Test for specified microorganisms.
4. Japanese Pharmacopoeia 4.05 (2008) Microbiological examination of non-sterile products: Test for specified microorganisms.
5. Larone (1995) Medically important fungi: a guide to identification, 3rd ed. American Society for Microbiology, Washington, D.C.
6. MacFaddin, J.D. (1985) Media for isolation-cultivation-identification-identification-maintenance of medical bacteria, p. 695-699, vol. 1. Williams & Wilkins, Baltimore, MD.
7. Taplin D., N. Zaias, N. Rebell and H. Blank (1969) Isolation and recognition of dermatophytes on a new medium (DTM). Arch Dermatol. 99:203.
8. Sabouraud (1892) Ann. Dermatol. Syphil. 3:1061.

PRESENTATION

		Contents	Ref.
DTM / Sabouraud	90 mm ready-to-use plates	20 plates	18595
DTM / Sabouraud	90 mm ready-to-use plates	100 plates	18595*

TABLE OF SYMBOLS

LOT Batch code	IVD <i>In vitro</i> Diagnostic Medical Device	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse



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