Technical Data Sheet

CE Dermatophytes Selective Agar (DTM) acc. to TAPLIN

Ordering number: 1.10896.0500

Culture medium proposed by TAPLIN et al. (1969, 1970) for the isolation and rapid differentiation of dermatophytes from specimens including those infected with other microorganisms.

The comparative studies of MERTZ et al. (1970) demonstrated that the selectivity of Dermatophytes selective agar (DTM) is superior to that of other media used for cultivating fungi.

According to ALLEN et al. (1970), this medium offers the advantage that the dermatophytes grow rapidly and produce an unmistakable color change.

IVD in vitro diagnosticum - For professional use only

Mode of Action

This culture medium contains the pH indicator phenol red and the selective inhibitors cycloheximide, gentamicin and chlorotetracycline, which partly suppress the growth of bacteria, yeasts and molds. When grown on DTM, most dermatophytes produce basic metabolites, which bring about an alkalinization of the acidic culture medium, causing the phenol red to change its color from yellow to red. This color change may, however, occasionally be caused by other microorganisms, too. Many molds produce acidic metabolites, which do not change the color of the culture medium. According to the authors, it is thus possible to differentiate rapidly between dermatophytes and other fungi with a high degree of accuracy (approx. 97 %).

Typical Composition

Peptone from soymeal	10.0 g/l
D(+)glucose	10.0 g/l
cycloheximide	0.5 g/l
gentamicin sulfate	0.1 g/l
chlorotetracycline	0.1 g/l
phenol red	0.2 g/l
agar-agar	17.0 g/l

Preparation and Storage, Cat. No. 1.10896. Dermatophytes Selective Agar (DTM) acc. to TAPLIN (500 g).

Preparation

Suspend 38 g/litre, autoclave under mild conditions (10 min at 121 °C), pour plates or prepare slant tubes.

pH: 5.5 ±0.2 at 25 °C.

The plates are clear and yellow-orange.

Specimen

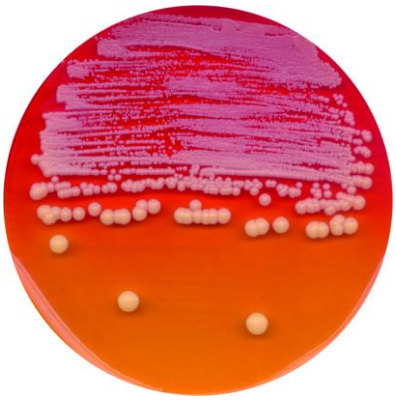
e.g. Nails, hair, skin.

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

Experimental Procedure and Evaluation

Inoculate the surface of the culture medium with specimens obtained by appropriate methods.

Incubation: 7 days, possibly up to 3 weeks at approx. 28 °C aerobically.



Candida albicans ATCC 10231

Geotrichum candidum DSMZ 1240

Storage

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.

Quality Control

Control Strains	ATCC #	Incubation	Expected Results
Trichophyton mentagrophytes	18748	7 d at 28 °C	Growth poor / good; Colour change to red
Trichophyton rubrum	28188	7 d at 28 °C	Growth poor / good; Colour change to red
Microsporum gallinae	12108	7 d at 28 °C	Growth poor / good; Colour change to red
Microsporum canis	36299	7 d at 28 °C	Growth poor / good; Colour change to red
Geotrichum candidum	DSMZ 1240	7 d at 28 °C	Growth fair / good; Colour change to red ±
Candida albicans	10231	7 d at 28 °C	Growth good / very good; Colour change to red
Aspergillus brasiliensis formerly Asp. niger	16404	7 d at 28 °C	Growth none / poor
Penicillium commune	10428	7 d at 28 °C	Growth none / poor
Saccharomyces cerevisiae	9763	7 d at 28 °C	Growth none
Bacillus cereus	11778	7 d at 28 °C	Growth none
Escherichia coli	25922	7 d at 28 °C	Growth none
Staphylococcus aureus	25923	7 d at 28 °C	Growth none

Please refer to the actual batch related Certificate of Analysis.

Literature

ALLEN, A.M., DREWRY, R.A., a. WEAVER, R.E.: Evaluation of a new color indicator media for diagnosis of dermatophytosis. - Arch. Derm., 102; 68- 70 (1970).

MERTZ, W.G., BERGER, C.L., a. SILVA-HUTNER, M.: Media with pH-indicator for the isolation of dermatophytes. - Arch. Derm., 99; 203-209 (1969).

TAPLIN, D., ALLEN, A.M., a. MERTZ, P.M.: Experience with a new indicator medium (DTM) for the isolation of dermatophyte fungi, in "Proceedings of the International Symposium of Mycoses", scientific publication 205. Washington, D.C. Pan American Health Organization, 55-58 (1970).

Ordering Information

Product	Cat. No.	Pack size
Dermatophytes Selective Agar (DTM) acc. to TAPLIN	1.10896.0500	500 g

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