Sabouraud Maltose Agar

M062

Sabouraud Maltose Agar is used as an excellent medium for the propagation of moulds and yeasts, particularly the parasitic fungi concerned with skin and scalp lesions.

Composition**

Ingredients	Gms / Litre
Maltose	40.000
Mycological, peptone	10.000
Agar	15.000
Final pH (at 25°C)	5.6±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 65 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Fungi were among the first microorganisms recognized because some of the fruiting structures, such as the mushrooms, are large enough to be seen without a microscope. Fungi can be grouped simply on the basis of morphology as either yeasts or moulds (1). Sabouraud Maltose Agar was formulated by Sabouraud (2) and is used for the isolation and differentiation of yeast and moulds. (3, 4, 5)

Mycological peptone provides nitrogen, vitamins, minerals, amino acids and growth factors. Maltose provides an energy source for the growth of microorganisms. The low pH favours fungal growth and inhibits contaminating bacteria from clinical specimens (1). The acid reaction of the final medium is inhibitory to a large number of bacteria making it particularly useful for cultivating fungi and aciduric microorganisms. For isolation of fungi from contaminated specimens, a selective medium should be inoculated simultaneously. Incubate cultures for 4 to 6 weeks before reporting as negative.

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Gelling
Firm, comparable with 1.5% Agar gel

Colour and Clarity of prepared medium
Light amber coloured clear to slightly opalescent gel forms in Petri plates

Reaction
Reaction of 6.5% w/v aqueous solution at 25°C. pH : 5.6±0.2

pH
5.40-5.80

Cultural Response
M062: Cultural characteristics observed after an incubation at 25 - 30°C for 48 - 72 hours.(Incubate Trichophyton species for for upto 7 days)

Organism	Inoculum (CFU)	Growth	Recovery
Cultural Response			
**Aspergillus brasiliensis ATCC 16404*	50-100	good-luxuriant	
Candida albicans ATCC 10231	50-100	good-luxuriant	>=70%

Escherichia coli ATCC 25922	50-100	good-luxuriant (Inhibited on media with lower pH)	>=70%
Lactobacillus casei ATCC 9595	50-100	good-luxuriant	>=70%
Saccharomyces cerevisiae ATCC 9763	50-100	good-luxuriant	>=70%
Trichophyton rubrum ATCC 28191	50-100	good-luxuriant	

Key : *- Formerly known as *Aspergillus niger*

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label.

Reference

1. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
2. Sabouraud R., 1892, Ann. Dermatol. Syphil. 3 : 1061.
3. Davidson and Dowding, 1932, Arch. Dermatol. Syphilol. 26:660.
4. Davidson, Dowding and Buller. 1932. Can. J. Res. 6:1.
5. Frank L. S., 1932, Arch. Dermatol. Syphilol., 26: 457

Revision : 1 / 2011

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