



ASCOSPORE AGAR

TM 1141

For detection of Ascosporegenous yeast

Composition

Ingredients	Gms/Ltr.
Agar	30.00
Potassium acetate	10.00
Yeast extract	2.50
Dextrose	1.00

* Dehydrated powder store, in a dry place in tightly- sealed containers below 25°C and protected from direct sunlight.

Instructions for Use

Dissolve 43.50gms in 1000 ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool to 40 - 45°C. Mix well and pour into sterile Petri plates.

Appearance: Medium amber in colour, slightly opalescent gel

pH (at 25°C): 6.4 ± 0.2

Principle

ASCOSPORE AGAR is used for detection of Ascosporegenous yeast. Ascospore agar is synthetic enrichment medium that produces sporulation for the perfect stage of yeasts. An ascospore is a spore contained in an ascus or that was produced inside an ascus. This kind of spore is specific to fungi classified as ascomycetes (Ascomycota). Ascospore production was first described by "Adams" in 1949 and was later improved by studies of "McClary" et al. Medium composed of Potassium acetate in which Potassium is required for sporulation where as Acetate supplies energy through oxidative respiratory mechanism. Dextrose acts as source of carbohydrate in the medium. Yeast extract provides Vitamin B₁₂ complex and also stimulates ascospore formation.

Interpretation

Cultural characteristics observed after inoculating (10³CFU/ml), on incubation at 25 - 30°C for 3 – 5 days.

Microorganisms	ATCC	Inoculum (cfu/ml)	Growth	Ascospores
<i>Candida albicans</i>	10231	10 ³	Good	negative
<i>Saccharomyces cerevisiae</i>	9763	10 ³	Good	positive

References

1. MacFaddin J.F.,1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Williams and Wilkins, Baltimore.
2. McClary D.O., Nulty W.L. and Miller G.R., 1959, J.Bacteriol., 78:362