



Product :

BIO EXPERTISE SABOURAUD CHLORAMPHENICOL CYCLOHEXIMIDE AGAR





Revision date: 27/07/2023

Specification

Solid medium used for the selective isolation of pathogenic fungi from clinical specimens with high contamination of associated microbiota.

Formula * in q/L

Final pH 5.6 ±0,2 at 25 °C

Directions

Suspend 45.5 g of powder in 1 L of distilled water and bring to the boil. Distribute into final containers and sterilize in the autoclave at 121°C for 15 minutes. Do not overheat.

Description

In these medium glucose is the energy source and peptone provides nitrogen, vitamins and oligoelements. Cycloheximide suppresses almost all the growth of the saprophytic fungi and Chloramphenicol inhibits the bacterial growth. Agar is the solidifying agent

This medium uses the Emmons Medium (that is, Sabouraud-Glucose Medium at neutral pH) as a nutritive base that turns selective by the addition of Chloramphenicol and Cycloheximide. The dermatophytes are no sensitive to these antibiotics but them inhibits the growth of opportunistic and saprophytic fungi. There are evidence that Cycloheximide inhibit also some know pathogens as *Cryptoccus neoformans*, *Aspergillus fumigatus*, *Pseudallescheria boydii*, *Penicillium marneffei*, some *Candida* species and the zygomycetes and, in the investigation of fungi that causes systemic diseases, is recommended the use of the medium together with other non-selective media.

Technique

The sample under investigation is collected in a suitable way and is inoculated on the surface of the culture medium according to the established internal protocols in any laboratory.

Quality control

Incubation temperature: 25-30°C Incubation time: 48 h-8 days

Inoculum: 10-100 CFU (Productivity) // 1.000-10.000 CFU (Selectivity). Spiral Plate Method (ISO/TS 11133-1/2)

Microorganism	Growth	Remarks
Candida albicans ATCC® 10231	Productivity > 0.50	-
Trichophyton mentagrophytes ATCC® 9533	Productivity > 0.50	-
Aspergillus brasiliensis ATCC® 16404	Inhibited	-
Escherichia coli ATCC® 8739	Inhibited	-

References

- · AJELLO, L., L:K: GEORG, W. KAPLAN & L. KAUFFMAN (1963) CDC Laboratory Manual for Medical Mycology. PHS Publication No. 994. US Government Printing Office, Washington D.C.
- · ARENAS, R. (2003) Micología Médica. 2ª Ed. McGraw Hill. Madrid.
- ATLAS, R.M. & L.C.PARKS (1993) Handbook of Microbiological Media. BocaRaton, Fla. USA.
- · BARON, E.J., M.A. PFALLER, F.C. TENOVER & H. YOLKEN (Eds.)1995. Manual of Clinical Microbiology. ASM. Washington D.C.
- · GEORG, L.K., E.S. McDONOUGH, L. AJELLO & S. BRINKMAN (1960) In vitro effects of antibiotics on yeast-phase of Blastomyces dermatitidis and other fungi. J. Lab & Clin. Med. 55:116-119.
- · LAND, G.A. (1992) Culture Media. En H.D. Isenberg (ed.)Clinical microbiology procedures handbook, vol 1. ASM. Washington D.C.
- · LARONE, D.H. (2002) Medically important fungi: A guide to identification. 4th Edition. ASM Press Washington D.C.
- · LENETTE, E.H. (Ed.) 1985. Manual of Clinical Microbiology, 4th ed., ASM. Washington, D.C.
- · McGINNIS, M.R. (1980) Laboratory Handbook of Medical Mycology. Academic Press Inc. New York, N.Y., USA.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).

^{*} Adjusted and /or supplemented as required to meet performance criteria