Fungi Kimmig Agar Base

M1010

Fungi Kimmig Agar Base is used for cultivation, identification and preservation of fungal strains.

Composition**

Ingredients	Gms / Litre
Peptic digest of animal tissue	9.300
Casein enzymic hydrolysate	4.300
Sodium chloride	11.400
Dextrose	10.000
Agar	15.000
Final pH (at 25°C)	6.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 50 grams in 1000 ml distilled water containing 5 ml glycerol. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If desired, selective medium is obtained by aseptically adding filter sterilized solutions of 0.40 gm Cycloheximide, 40,000 IU Penicillin, 40 mcg Streptomycin, 80 mg Colistin and 100 mg Novobiocin in a previously cooled sterile medium. Mix well and pour in sterile Petri plates.

Principle And Interpretation

Fungi identification is usually carried out by examining the hyphae or spores formed by fungi on the medium plates. Rieth stated that Fungi Kimmig Agar Base promotes the development of growth forms, which are used as important characteristic criteria for identification (1). Fungi Kimmig Agar is formulated as described by Kimmig and Rieth for the cultivation, identification and preservation of fungal strains (2). The appearance of growth on Kimmig Agar is considered as important criteria in identification of fungal strains (1). This medium can also be used as a base for preparing selective agars.

The medium contains peptic digest of animal tissue and casein enzymic hydrolysate, which provides nitrogenous nutrients. Dextrose is the carbohydrate source while sodium chloride maintains osmotic balance of the medium. This medium can also be used as a base for preparing selective agars. Addition of cycloheximide, according to Georg et al (3) and antibiotics like penicillin, streptomycin, according to Hantschke (4) and colistin, novobiocin etc. inhibit the growth of many gram-positive, gram-negative bacteria and also some fungi like *Saccharomyces* .

Quality Control

Appearance
Cream to yellow homogeneous free flowing powder

Gelling
Firm, comparable with 1.5% Agar gel

Colour and Clarity
Medium amber coloured, clear to slightly opalescent gel forms in Petri plates

Reaction
Reaction of 5.0% w/v aqueous solution at 25°C. pH : 6.5±0.2

pH
6.30-6.70

Cultural Response
M1010: Cultural characteristics observed with added antibiotics after an incubation at 25-30°C for 5-7 days.

Organism	Growth (without antibiotics)

Cultural Response

**Aspergillus brasiliensis ATCC 16404*	good-luxuriant
Candida albicans ATCC 10231	good-luxuriant
Saccharomyces cerevisiae ATCC 9763	good-luxuriant
Trichophyton mentagrophytes ATCC 18748	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. Rieth H., 1969, Dermatophyten, Hefen und Schimmelpilze auf Kimmig-Agar. Mykosen, 12:73-74.
2. Kimmig J. U., Rieth H., 1953, Antimykotica in Experiment and Klinik, Arzneimittelforsch 3:267-276.
3. Georg L. K., Ajello L. and Papageorge C., 1954, J. Lab. Clin. Med.; 44:422.
4. Hantschcke D., 1968, Mykosen 11; 769-778.

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