Rose Bengal Agar + Chloramphenicol

Cat. 1081

For the cultivation and selective isolation of yeasts and molds

Practical information

Aplications	Categories
Selective isolation	Yeasts and molds

Industry: Water / Environmental monitoring / Food

Principles and uses

Rose Bengal Agar + Chloramphenicol is a neutral selective medium recommended for the enumeration of molds and yeasts in foods, water and environmental materials. Rose-Bengal Chloramphenicol Agar is recommended for fresh proteinaceous foods with flora mostly made up of of Gram-negative rod-shaped bacteria. It is also appropriate when higher and longer incubation temperatures, around 35°C, are required.

Bacteriological peptone provides the nitrogen, vitamins, minerals and amino acids source. Dextrose is the fermentable carbohydrate as a carbon and energy source. Potassium phosphate is the buffer. Magnesium sulfate provides sulfur and other trace elements. Rose bengal is a selective agent that inhibits the growth of bacteria and limits the size and height of faster-growing molds, allowing for the development and detection of other slower-growing yeasts - molds appear pink colored. Chloramphenicol serves as a selective agent, inhibiting bacterial growth. It is a recommended antibiotic for neutral media due to its heat stability and wide bacterial spectrum. Bacteriological agar is the solidifying agent.

Formula in g/L

Bacteriological agar	15	Bacteriological peptone	5
Chloramphenicol	0,1	Dextrose	10
Magnesium sulfate	0,5	Potassium phosphate	1
Rose bengal	0,05		

Preparation

Suspend 31,6 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 ºC for 15 minutes. Cool to 45-50 ºC, mix well and dispense into plates.

Instructions for use

- The inoculation can be carried out from a diluted source, either by the extension of 0.1 ml of each dilution into the prepared plates, or by the pouring method, depositing 1 ml of each dilution into the empty plate, pouring the medium immediately after (once it has been cooled to 45°C).
- Incubate for 7 days at 25-30°C.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Pink	Intense pink	7,2±0,2

Microbiological test

Incubation conditions: (25-30 ºC / 7 days)

Microorganisms	Specification	Characteristic reaction
Aspergillus niger ATCC 1015	Good growth	
Candida albicans ATCC 10231	Good growth	Pink, plane, bulky colony
Aspergillus brasiliensis ATCC 16404		White mycelium, black spores
Escherichia coli ATCC 25922	Inhibited growth	

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

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