Rose Bengal Chloramphenicol Agar

M640

Intended use

Recommended for selective isolation and enumeration of yeasts and moulds from food, environmental materials and clinical samples.

Composition**

Ingredients	g / L
Mycological peptone	5.000
Dextrose (Glucose)	10.000
Potassium dihydrogen phosphate	1.000
Magnesium sulphate	0.500
Rose bengal	0.050
Chloramphenicol	0.100
Agar	15.500
Final pH (at 25°C)	7.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 32.15 grams in 1000 ml purified/distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Rose Bengal Chloramphenicol Agar was formulated originally by Jarvis (1) and further modified by Overcast and Weakley (2). The use of rose bengal in the media having neutral pH was reported by Smith and Dawson (3). Mycological peptone provides carbon, nitrogen substances, long chain amino acids, vitamins and other essential growth nutrients. Dextrose (Glucose) is the fermentable carbohydrate. Chloramphenicol has inhibitory action on gram-negative bacteria. Rose bengal dye suppresses the development of bacteria and reduces the spreading of moulds, controls the size and height of moulds colonies such as *Rhizopus* species (2). The medium has neutral pH, which with the antibiotics has noted to be advantageous (4,5). Rose bengal is taken up by moulds and yeast colonies thereby assist in enumeration (6).

The number of yeasts or moulds is calculated per 1 gram or 1 ml of sample to be tested by multiplying the number of colonies by dilution factor. Colonies of bacteria and yeasts could be confused by appearance and thus should be examined microscopically. Due to the selective properties of this medium and the type of specimen being cultured, some strains of fungi may grow poorly or fail to grow on the complete medium; similarly, some strains of bacteria may also not inhibited or only partially inhibited.

Care should be taken not to expose this medium to light, since photo degradation of rose bengal yields compounds that are toxic to fungi (7,3).

Type of specimen

Food samples; Environmental samples, Clinical samples -skin scrapings.

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (8,9).

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (6).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

The medium should not be exposed to light, since photodegradation of rose bengal yields compounds that are toxic to fungi.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance
Light yellow to pink homogeneous free flowing powder
Gelling
Firm, comparable with 1.55% Agar gel.
Colour and Clarity of prepared medium
Deep pink coloured clear to slightly opalescent gel forms in Petri plates.
Reaction
Reaction of 3.22% w/v aqueous solution at 25°C. pH : 7.2±0.2
pH
7.00-7.40
Cultural Response
Cultural characteristics observed after an incubation at 25-30°C for 5 days.

Organism	Inoculum (CFU)	Growth
#*Aspergillus brasiliensis* ATCC 16404 (00053*)	50-100	good-luxuriant
**_Bacillus spizizenii_ ATCC 6633 (00003*)	>=10^4	inhibited
*Cladosporium cladosporioides*ATCC 11278	50-100	good-luxuriant
Escherichia coli ATCC 25922 (00013*)	>=10^4	inhibited
Enterococcus faecalis ATCC 29212 (00087*)	>=10^4	inhibited
Mucor racemosus ATCC 42647	50-100	good-luxuriant
Pencillium notatum ATCC 10108	50-100	good-luxuriant
Saccharomyces cerevisiae ATCC 9763	50-100	good-luxuriant

Key: * Corresponding WDCM numbers

Formerly known as *Aspergillus niger*

** Formerly known as *Bacillus subtilis* subsp. *spizizenii*

Storage and Shelf Life

Store the dehydrated and prepared media between 15-25°C in a tightly closed container . Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Use before expiry date on the label. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (8,9).

Reference

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6.Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C. 8.Banks J. G.
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Revision : 05/2025

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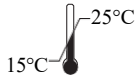
IVD ***In vitro*** **diagnostic medical device**



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
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www.cepartner4u.eu

CE Marking

Do not use if package is damaged

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