Rose Bengal Chloramphenicol (RBC) Agar

RBC Agar

Selective agar for the enumeration of yeasts and moulds in foodstuffs, particularly proteinaceous food.

Mode of Action

The neutral pH in combination with chloramphenicol suppresses the growth of most bacteria. Rose bengal, taken up intracellular by fungi, restricts the size and the spreading of moulds, preventing overgrowth of slow growing species by luxuriant species.

Typical Composition (g/litre)

Mycological peptone 5.0; glucose 10.0; potassium dihydrogen phosphate 1.0; magnesium sulfate 0.5; Rose Bengal 0.05; chloramphenicol 0.1; agar-agar 15.5.

pH 7.2 \pm 0.2 at 25 °C.

Preparation

Suspend 32.2 g in 1 liter of demin. water and heat to boiling until completely dissolved. Autoclave the medium at 121 °C for 15min. Cool to approx. 50 °C, mix well and pour plates.

The appearance of the prepared medium is pink to red .

When stored at +2 to +8 $^{\circ}$ C in the dark, the shelf life of plates is approximately 1 week and in bottles approx. 2 months.

Experimental Procedure

Directly inoculate the agar plates using surface spreading technique with serial dilutions.

Incubate at 22 °C

for 5 days in the dark.

Interpretation of Results

Count the number of yeast and moulds per 1 gram of food.

Quality control

Test strainsGrowthSaccharomyces cerevisiae ATCC 9763good / very goodRhodotorula mucilaginosa DSMZ 70403good / very good, orange coloniesMucor racemosus ATCC 42647fair / goodEnterococcus faecalis ATCC 29212noneEscherichia coli ATCC 25922none

Literature

JARVIS, B. 1973 Comparison of an improved rose-bengal-chlortetracycline agar with other media for the selective isolation and enumeration of moulds and yeasts in food. **J. Appl. Bacteriol. 36**, 723-727.

Ordering Information

Product	Merck Cat. No.	Pack size
Rose Bengal Chloram- phenicl (RBC) Agar	1.00467.0500	500 g



Mucor racemosus ATCC 42647