

# YP Agar Base Medium

Cat. 1513

For maintaining and developing yeast in molecular biology procedures.

## Practical information

Applications	Categories
Growth	Yeasts

Industry: Molecular biology / Microbiological Culture Media

## Principles and uses

YP Agar Base Medium is used for the maintenance and the development of yeast in molecular biology procedures.

YP Agar Base Medium is also used to cultivate *Saccharomyces cerevisiae* and other yeasts. Yeasts grow well on a medium containing only a minimal amount of glucose and salts. This medium contains glucose (with the addition of dextrose after autoclaving), salts and proteins, which favours the growth of *Saccharomyces cerevisiae* and reduces growing times. Yeast extract is the source of vitamins, particularly the B-group, essential for bacterial growth. Peptone provides nitrogen, vitamins, minerals and amino acids. Bacteriological agar is the solidifying agent.

*Saccharomyces cerevisiae* has a genome of 14 Mb containing 6.000 genes arranged in 16 chromosomes, which have been completely sequenced, and thus, is a species type in microbiology and genetics studies.

## Formula in g/L

Bacteriological agar	20	Peptone	20
Yeast extract	10		

## Preparation

Suspend 50 grams of the dehydrated medium in 900 ml of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 °C for 15 minutes. Cool to room temperature and aseptically add 100 ml of sterile dextrose at 20%. Mix well and dispense into appropriate containers.

## Instructions for use

Poured plate method:

- Deposit 1 ml of the initial suspension and/or diluted sample in an empty Petri dish.
- Add 12-15 ml of agar cooled to 44-47 °C in each Petri dish and mix gently moving the plate.
- Allow the plates to solidify and incubate in an inverted position at a temperature of 25±2 °C for 42-48 hours.

Streak plate method:

- In a Petri dish, add 12-15 ml of molten agar and let it solidify.
- Inoculate 10 µl of the initial suspension and/or diluted sample.
- Extend the inoculum with a sterile loop on the agar surface.
- Incubate the plates in an inverted position at a temperature of 25±2 °C for 42-48 hours.

## Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Clear amber, slightly opalescent	7,0±0,2

## Microbiological test

Incubation conditions: (25±2 °C / 42-48 h).

## Microorganisms

Candida albicans ATCC 10231  
Saccharomyces cerevisiae ATCC 9763

## Specification

Good growth  
Good growth

## Storage

Temp. Min.:2 °C  
Temp. Max.:25 °C

## Bibliography

Guide to yeast genetics and molecular biology. (1991) Ed. Christine Guthrie & Gerald Fink. Methods in Enzymology vol. 194.  
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