

YP Base Medium

Cat. 1511

For maintaining and developing yeast in molecular biology procedures.

Practical information

Applications	Categories
Growth	Yeasts

Industry: Molecular biology

Principles and uses

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

YP 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 favors 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.

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

Peptone	20	Yeast extract	10
---------	----	---------------	----

Preparation

Suspend 30 grams of the 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

Inoculate and incubate 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	Amber, slightly opalescent	6,5±0,2

Microbiological test

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

Microrganisms	Specification
<i>Candida albicans</i> ATCC 10231	Good growth
<i>Saccharomyces cerevisiae</i> ATCC 18790	Good growth

Storage

Temp. Min.: 2 °C

Bibliography

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

Current protocols in Molecular Biology. Eds. Ausubel, F. M. Brent, R., Kingston, R, E., Moore, D. D., Seidman, J. G., Smith J. A., and Struhl, K.13,01.-13.2.10. The Yeast Genome Directory (1997, May 29) Nature Supp. to volume 387.

Joseph Sambrook, David W .Russell. The condensed protocols from molecular cloning: a laboratory manual.