

# YPD Broth (YEPD Broth)

Yeast Extract Peptone- Dextrose (YPD) broth is recommended for the growth of *Saccharomyces cerevisiae* for molecular biology purposes.

REF: BS.1/YA01.100.0100	100 Gram	REF: BS.1/YA01.250.0250	250 Gram
REF: BS.1/YA01.500.0500	500 Gram		

## CLINICAL SIGNIFICANCE

YPD Broth (YEPD Broth) is recommended by Sherman (1) for the growth of *Saccharomyces cerevisiae* for molecular biology purposes. This medium supports the growth of most heterotrophic microorganisms but due to their simple composition, they have been adopted as the basal media for the routine cultivation of yeasts. General methods in yeast genetics specify using Yeast Extract Peptone- Dextrose (YPD) medium for cultivating *S. cerevisiae* and other yeasts (2). Yeasts grow well on a minimal medium containing only dextrose and salts. The addition of protein and yeast cell extract hydrolysates allows faster growth so that during exponential or log-phase growth, the cells divide every 90 minutes (2).

## METHOD PRINCIPLE

The medium composition aids in growth of *Saccharomyces*. Peptic digest of animal tissue provides nitrogenous nutrients. Yeast extract provides nitrogenous nutrients as well as Vitamin B Complex. Dextrose provides the carbohydrate and energy source to support growth of *S. cerevisiae*.

## MEDIA COMPOSITION

Item	Formula per liter of medium
- Peptic digest of animal tissue	20.00 gm
- Yeast extract	10.00 gm
- Dextrose (Glucose)	20.00 gm

## PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Respect country requirement for waste disposal.

**S56:** dispose of this material and its container at hazardous or special waste collection point.

**S57:** use appropriate container to avoid environmental contamination.

**S61:** avoid release in environment.

For further information, refer to the YPD Broth material safety data sheet.

## STORAGE AND STABILITY

**BioScien** YPD Broth should be stored between 10-30°C in a firmly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development

due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

**Final pH 6.5 ± 0.2 at 25°C**

## PREPARATION

Suspend 50.0 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes.

## Deterioration

The color of **BioScien** YPD Broth is Cream to yellow homogeneous free flowing powder. Prepared Media is Light amber coloured clear solution in tubes. If there are any physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

## SPECIMEN

Food and beverages samples; environmental and microbiology samples.

## EQUIPMENT REQUIRED NOT PROVIDED

- Sterile test tubes
- Incubator
- Autoclave

## PERFORMANCE CHARACTERISTICS

Cultural characteristics observed after an incubation at 25-30°C for 48-72 hours.











Microorganism	Growth
<i>Aspergillus brasiliensis</i> ATCC 16404	good-luxuriant
<i>Saccharomyces cerevisiae</i> ATCC 9763	good-luxuriant
<i>Candida albicans</i> ATCC 10231	good-luxuriant

## QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control still out of range please contact **BioScien** technical support.

## REFERENCES

1. Sherman F., Meths. Enzymol. 194, 3 (1991).
2. Ausubel F. M., Brent R., Kingston R. E., Moore D. D., Seidman J. G., Smith J. A. and Struhl K., 1994, Current protocols in molecular biology, Current Protocols, Brooklyn, N.Y.

SYMBOLS IN PRODUCT LABELLING	
 For in-vitro diagnostic use	 Number of <n> test in the pack
 Batch Code/Lot number	 Caution
 Catalogue Number	 Do not use if package is damaged
 Temperature Limitation	 Consult Instruction for use
 Expiration Date	
 Manufactured by	