

YPD (YEPD Growth Agar) Agar

Intended Use

YPD (YEPD Growth Agar) Agar is used for the growth of *Saccharomyces cerevisiae*.

Summary

YPD (YEPD Growth Agar) Agar is used for the maintenance and propagation of Yeasts including *S. cerevisiae* in various molecular microbiology procedures. Yeasts are unicellular eukaryotes. They are extensively studied as model organism in molecular genetics. They are also known as chemoorganotrophs as they utilize organic compounds as a source of energy.

Principle

YPD (YEPD Growth Agar) Agar functions as a complete medium for yeast growth and it contains yeast extract, peptone and glucose or dextrose. Yeast extract supplies B-complex vitamins and it contains all the amino acids necessary for growth. Peptone acts as the source of nitrogen, vitamins and minerals. Dextrose serves as the carbon source. This medium supports the vigorous growth of wild type as well as mutant strains of all kinds of yeast.

Formula*

Ingredients	g/L
Peptone	20.0
Yeast Extract	10.0
Dextrose	20.0
Agar	15.0
Final pH (at 25°C)	6.5 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling

Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions

1. Suspend 65.00 g of the powder in 1000 mL purified / distilled water.
2. Heat the agar medium with frequent agitation and boil for 1 minute to completely dissolve the powder.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Cream to yellow coloured, homogeneous, coarse free flowing powder.

Prepared Appearance: Light to medium amber coloured, clear to slightly opalescent gel forms in petridishes.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 20-25°C for 48-72 hours.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 20-25°C.

Growth Promoting

Organism (ATCC)	Growth	Incubation Period
<i>Kluyveromyces lactis</i> (8563)	Good	72 Hours
<i>Saccharomyces cerevisiae</i> (18790)	Good	48 Hours
<i>Saccharomyces cerevisiae</i> (9080)	Good	48 Hours

Note: For Good growth - Growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Adams, A., D. E. Gottschling, C. A. Kaiser, and T. Stearns. 1997. Methods in yeast genetics: A Cold Spring Harbor Laboratory Course Manual. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.
2. Burke, D., Dawson, D., and T. Stearns. 2000. Method in yeast genetics. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
201250030500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.
