

YPD BROTH (YEPD BROTH)
TM 1121

For the growth of *Saccharomyces cerevisiae* in molecular biology

Composition

Ingredients	Gms/Ltr.
Peptone	20.00
Dextrose	20.00
Yeast extract	10.00

* Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 50gms in 1000ml of distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving for 15 psi (at 121°C) for 15 min. Cool to 45-50°C and pour into sterile Petri plates.

Appearance: Light to medium amber, clear to slightly opalescent
pH (at 25°C): 6.5 ± 0.2

Principle

YPD BROTH (YEPD BROTH) is used for the growth of *Saccharomyces cerevisiae* in molecular biology. Yeasts are unicellular, eukaryotic, budding cells that are generally round-to-oval or elongate in shape, they multiply principally by the production of blasto conidia (buds). Yeast colonies are moist and creamy or glabrous to membranous in texture. Yeast grows well on minimal medium containing only carbohydrate source dextrose and salts. The addition of protein and yeast extract allows faster growth to yeasts cells. Peptone provides carbon, nitrogen, minerals, vitamins, trace ingredients and other essential growth nutrients. Yeast extracts supplies vitamin B-complexes, which stimulate the growth of yeasts and bacteria. Dextrose is the carbohydrate energy source.

Interpretation

Cultural characteristics observed after inoculating (10^3 - 10^4 CFU / ml), on incubation at $25 \pm 2^\circ\text{C}$ for 42 - 48 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth
<i>Kluyveromyces lactis</i>	8563	10^3 - 10^4	Good
<i>Saccharomyces cerevisiae</i>	9080	10^3 - 10^4	Good

References

1. F. Sherman, Meths. Enzymol. 194, 3 (1991).
2. J.P. Martinez, et al., Studies on phenotype switching with *Candida albicans*, J. Gen. Microbiol. 136, 2421. (1990).
3. F. Sherman, G.R. Fink, J.B. Hicks, The Laboratory Course Manual for Methods in Yeast Genetics. Cold Spring Harbor Press, Cold Spring Harbor, NY. p. 179. (1986).
4. Guide to yeast genetics and molecular biology. Ed. Christine Guthrie & Gerald Fink. Methods in Enzymology vol. 194. (1991).