



Preservative Resistant Yeast Agar Base (PRY)

M1914

For cultivation of Yeasts

Composition**

Ingredients	Gms / Litre
Yeast extract	10.000
Mannitol	10.000
Agar	15.000

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 35 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 45-50°C and add 10ml glacial acetic acid and immediately dispense as desired, because the medium cannot be reheated.

Principle And Interpretation

Preservative Resistant Yeast Medium is used to selectively isolate and enumerate *Zygosaccharomyces species*. It is used for the detection of preservative resistant yeast in water and beverages. The medium prevents growth of other yeasts such as *Saccharomyces cerevisiae* that are tolerant to lower levels of commonly used food preservatives. Spoilage resulting from growth of the yeast *Zygosaccharomyces* is widespread, which has caused significant economic losses to the food industry. Within this genus, *Z. bailii* is one of the most troublesome species due to its exceptional tolerance to various stressful conditions (1). Also *Z. lentus* is a significant new osmophilic, preservative-resistant spoilage yeast, capable of growth at low temperature (2).

Yeast extract in the medium provides the essential nutrients, while mannitol acts as source of fermentable carbohydrate.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel

Colour and clarity of prepared medium

Light amber coloured clear to slightly opalescent gel forms in Petri plates

Cultural Response

Cultural Response was observed at 20-25°C for 2-7 day's. Recovery rate is considered as 100% for fungus growth on Sabouraud Dextrose Agar

Cultural Response

Organism	Growth
Cultural Response <i>Candida albicans</i> ATCC 10231	luxuriant
<i>Zygosaccharomyces bailii</i>	luxuriant
<i>Saccharomyces cerevisiae</i> ATCC 9763	good

Storage and Shelf Life

Store below 30°C in tightly closed container and prepared medium at 2-8°C. Use before expiry date on label.

Reference

1. James, S.A., Stratford, M., 2003. Spoilage yeasts with emphasis on the genus *Zygosaccharomyces*. In: Boekhout, T. and Robert, V. (Eds), *Yeasts in food - Beneficial and detrimental aspects*. Woodhead Publishing Ltd and CRC Press, Cambridge,

pp. 171-191. 2. Steels, H., James, S. A., Roberts, I. N. and Stratford, M. (1999). Journal of Applied Microbiology, 87: 520–527. doi: 10.1046/j.1365-2672.1999.00844.x

Revision : 1 / 2011



Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.