Technical Data Sheet

Preservative Resistant Yeast (PRY) Broth – 2mL Liquid Media Ampoules
Cat. No. MHA00PRY2

This medium is recommended for the detection of preservative resistant yeasts in water and beverage samples.

Mode of Action
Preservative resistant yeast broth is a selective medium with a low pH used for the estimation of spoilage micro-organisms resistant to acetic acid by membrane filtration technique. It's used to selectively isolate and enumerate Zygosaccharomyces species. The medium prevents growth of other yeasts such as Saccharomyces cerevisiae that are tolerant to lower levels of commonly used food preservatives. Spoilage due to Zygosaccharomyces is widespread, which has caused significant economic losses for the food industry. Yeast extract in the medium provides essential nutrients, while mannitol acts as a source of fermentable carbohydrates.

Typical Composition (per liter of purified water)

Mannitol	10.0 g
Yeast Extract	10.0 g
Glacial Acetic Acid	10.0 mL

Application
1. Collect the sample in a sterile container. Sodium thiosulfate is necessary when the water sample contains a residual disinfectant. The sample should be a 100 ml minimum. Sample dilution may be necessary if high counts are anticipated.
2. Invert one Preservative Resistant Yeast (PRY) Broth ampoule 2 to 3 times. Open the ampoule. Remove the lid of a petri dish and carefully pour the contents equally onto the absorbent pad.
3. Set up the membrane filtration apparatus. Use sterile forceps to put the membrane filter in the assembly. The grid side is up.
4. Invert the sample / diluted sample for approximately 30 seconds to thoroughly mix the sample.
5. Pour the sample / diluted sample into the funnel. If the volume is less than 20ml, add 10 ml of sterile buffered dilution water to the funnel.
6. Apply the vacuum until the funnel is empty. Then stop the vacuum.
7. Rinse the funnel with 20ml to 30ml of sterile buffered dilution water. Apply the vacuum. Rinse the funnel two more times.
8. Stop the vacuum when the funnel is empty. Remove the funnel from the assembly. Use sterile forceps to lift the membrane filter.
9. Put the membrane filter on the absorbent pad. Let the membrane filter bend and fall equally across the absorbent pad to make sure that the air bubbles are not trapped below the filter.
10. Secure the lid on the petri dish and invert the dish.
11. Incubate the inverted petri dish for 3-5 days at 30° C.
12. Remove the petri dish from the incubator. Use a microscope to count the number of bacteria colonies on the membrane filter.
13. Interpret and report the results.

Results Reporting
Report the colony density as the number of colonies in 100ml of sample. If there's more than 200 colonies, dilute the sample and use the diluted sample in the test procedure.

Colonies in 100ml = Colonies counted / ml of sample x 100**.**

Storage and Shelf Life
The product can be used until the expiry date if the unopened ampoules are stored sealed in the aluminum foil bag at 2 – 10°C.

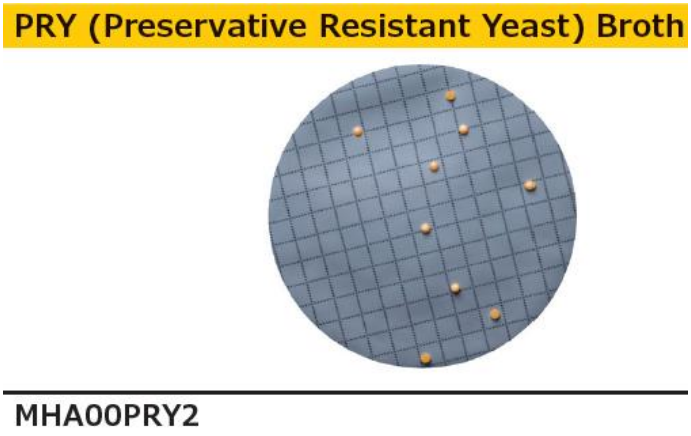
Disposal
Please dispose of used culture medium in accordance with local regulations (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Function	Control Strains	Incubation	Reference Medium	Method of Control	Expected Results
Productivity	Zygosaccharomyces baillii ATCC® 58445	3 – 5 days at 30° C	Previously validated batch of Preservative Resistant Yeast Broth	Quantitative	Recovery 85-115% Characteristic colonies

Please refer to the actual batch specific certificate of analysis.

Yeasts will form yellow colonies.



Ordering Information

Product	Cat. No.	Pack size
Preservative Resistant Yeast Broth	MHA00PRY2	50 x 2 mL plastic ampoules

Literature

James SA and Stratford M Yeasts in Food, 171-191, (2003)

Zygosaccharomyces lentus: a significant new osmophilic, preservative-resistant spoilage yeast, capable of growth at low temperature Steels H et al. Journal of Applied Microbiology 87(4), 520-527, (1999)

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