

Yeast Nitrogen Base Agar (Twin Pack)

Intended Use

Yeast Nitrogen Base Agar (Twin Pack) is used for assessing carbohydrate utilizing ability of yeasts using carbohydrate disc method.

Summary

Yeast Nitrogen Base Agar (Twin Pack) is a modification of Yeast Nitrogen Base formulated by Wickerham and Burton. Yeast Nitrogen Base Agar is used for assessing carbohydrate utilizing ability of yeasts using the carbohydrate disc method.

Principle

The original auxanographic technique, described by Beijerinck, employs small amounts of dry carbohydrates placed on the surface of a heavily seeded synthetic agar medium. Growth around the carbohydrate indicates that the sugar is assimilated as a carbon source by the yeast. The pattern of utilized carbohydrates is an auxanogram. Filter paper disc impregnated with carbohydrate and used instead of dry carbohydrate is an alternative technique. With added carbon source, the medium may also be used for susceptibility testing with antifungal drugs when defined medium is needed.

Formula*

Ingredients	g/L
Part A	
Agar	40.0
Part B	
Yeast Nitrogen Base	6.75
Final pH (at 25°C)	5.4 ± 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

PART A:

1. Suspend 40.00 g (Part A) of the powder in 900 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 12 minutes as per validated cycle.
4. Cool to 50°C and aseptically mix with the sterile Part B solution.
5. Add 3 mL of sterile 5% tartaric acid for 100 mL of the mixture just before pouring the plates.

PART B:

1. For best results, Part B should be prepared in 10X strength. Suspend 1.688 g of the powder in 25 mL purified / distilled water.
2. Warm if necessary, to dissolve the powder completely.
3. Sterilize the medium by filtration. keep refrigerated until use.
4. Final medium is made by pipetting 10 mL of part B into 90 mL of sterile purified / distilled water and this is mixed with 900 mL of molten part A.

Quality Control

Dehydrated Appearance: Part A: White to cream coloured, homogeneous, free flowing powder.

Part B: White to cream coloured, homogeneous free flowing powder.

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

Cultural Response: Cultural characteristics observed after an incubation at 25°C-30°C for of 6-7 days.

Organism (ATCC)

Kloeckera apiculata (9774)

Saccharomyces cerevisiae NRRL Y-567 (9763)

Saccharomyces uvarum (28098)

Growth

Good

Good

Good

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. Wickerham L. J., 1951, U.S. Dept. Agri. Tech. Bull No. 1029.
2. Wickerham L. J. and Burton K. A., 1948, J. Bacteriol., 56:363.
3. Lennette E. H., (Eds.), 1980, Manual of Clinical Microbiology, 3rd Ed., ASM, Washington D. C.
4. Padhye A. A., 1981, Diagnostic Procedures for Bacterial, Mycotic and Parasitic Infections, 6th Ed., APHA, Washington, D.C.
5. Beijerinck M. W., 1989, Arch. Neerl. Sc. Exact. Nat. 23: 367.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat. No.	Product Description	Pack Size
201250130100	Dehydrated Culture Media	100 g
201250130500	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.
