



NUTRIENT AGAR

- For in vitro use only -

Catalogue No. PN90 & TN94

Our Nutrient Agar is a general all-purpose medium used for the cultivation and isolation of a variety of non-fastidious bacteria and other microorganisms.

Our Nutrient Agar is based on the original recipe published by the American Public Health Association (APHA) in the early 20th century. At that time, the APHA recommended the use of this medium because of the need to standardize testing methods. Nutrient Agar is still a widely used general-purpose medium for the cultivation of non-fastidious microorganisms and is specified in many standard methods procedures for examining and testing water, foods and other materials. Additionally, it can be used for the cultivation and maintenance of non-fastidious microorganisms in the laboratory. Our current formulation adheres to guidelines put forth by the APHA and AOAC.

Nutrient Agar is a simple non-selective medium containing pancreatic digest of gelatin and beef extract. Together these components meet the nutritional requirements and allow for good growth of a wide variety of non-fastidious microorganisms.

Formula per Litre of Medium

Pancreatic Digest of Gelatin.....5.0 g
Beef Extract3.0 g
Agar..... 15.0 g

pH 6.8 ± 0.2

Recommended Procedure

1. Allow medium to reach room temperature.
2. Using an inoculum from the sample, perform a four-quadrant streak to obtain well-isolated colonies. If inoculating a tube, streak the slant of the medium from the bottom up in a fish-tail motion.

3. Incubate aerobically at 35°C.
4. Examine after 18-24 hours. Incubate medium an additional 24 hours if required.

Interpretation of Results

Nutrient Agar is a general purpose medium that allows a diverse number of microorganisms to grow therefore a varying number of colonial morphologies can be observed and described on this medium.

Additional tests should be performed on isolated colonies from pure culture in order to complete identification.

Quality Control

After checking for correct pH, color, depth, and sterility, the following organisms are used to determine the growth performance of the completed medium.

| Organism | Expected Result |
|--|-----------------|
| <i>Escherichia coli</i> ATCC 25922 | Growth |
| <i>Staphylococcus aureus</i> ATCC 25923 | Growth |

Storage and Shelf Life

Our Nutrient Agar should be protected from light and stored at 4°C to 8°C. For plated media, the medium side should be uppermost to prevent excessive accumulation of moisture on the agar surface. Under these conditions the plated medium has a 12 week shelf life and the tubed medium has a 26 week shelf life from the date of manufacture.

Ordering Information

| Cat# | Description | Format |
|------|--|--------|
| PN90 | Nutrient Agar [Standard 15x100-mm plate] | 10/pkg |
| TN94 | Nutrient Agar Slant 5-mL [16x100-mm screw-cap tube] | 10/pkg |

References

1. American Public Health Association. Standard methods of water analysis. 3rd ed. Washington, DC: American Public Health Association, 1917.
2. American Public Health Association. Standard methods of milk analysis. 4th ed. Washington, DC: American Public Health Association, 1923.
3. MacFaddin JF. Media for isolation-cultivation-maintenance of medical bacteria, Vol I. Baltimore: Williams & Wilkins, 1985.
4. Association of Official Analytical Chemists. Official methods of analysis of AOAC International. 16th ed. Arlington, VA: AOAC International, 1995.
5. Eaton AD, Clesceri LS, Greenberg AE, Eds. Standard methods for the microbiological examination of water and wastewater, 19th ed. Washington, DC: APHA, 1995.

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