Nutrient Agar Plate (Gamma-Irradiated)

Intended Use
Nutrient Agar is a general-purpose medium used for cultivation of wide variety of microorganisms.

Summary
Nutrient Agar plate is used for maintenance purpose or to check the purity of sub-cultures from isolation plates prior to biochemical or serological testing. It is used for the cultivation and enumeration of organisms in water, sewage, faeces and other materials, which are not particularly fastidious. Nutrient Agar is suitable for teaching purpose and maintenance of cultures, where a prolonged survival of organisms at an ambient temperature is required without risk of the overgrowth that can occur with a more nutritious medium.

Principle
Peptic digest of animal tissue, beef extract and yeast extract provide water-soluble substances including carbohydrates, vitamins, organic nitrogen compounds and salts. Sodium chloride maintains the osmotic equilibrium of the medium.

Formula*

Ingredients	g/L
Peptic Digest of Animal Tissue	5.0
Beef Extract	1.5
Yeast Extract	1.5
Sodium Chloride	5.0
Agar	15.0

*Adjusted to suit performance parameters.

Additional Material Required
Bacteriology Incubator.

Instructions for use
1. Open the sterile pack and remove Nutrient Agar Plate aseptically.
2. Inoculate/streak the plate and Incubate in inverted position as per standard procedure.

Reading and interpretation
1. After incubation, observe the microbial growth and count the colonies.
2. Interpretation is assured by user.

Quality Control
Appearance: Gel with smooth and even surface without any cracks, bubbles and drying or shrinking of media.
Colour of Medium: Light yellow coloured, very slightly opalescent gel in petriplates.
Quantity of Medium: 26 ± 2 g in 90 mm petriplate.
pH at 25°C±2°C: 7.4 ± 0.2
Gamma Irradiation : The above said product was Gamma Irradiated between 23KGy - 32KGy.
Growth Promotion Test : Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP and growth is observed after an incubation at 30-35°C for 18-48 hours.
Growth Promoting Properties : The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism.

Organism (ATCC)	Growth
Escherichia coli (8739)	Good
Staphylococcus aureus subsp. *aureus* (6538)	Good
Pseudomonas aeruginosa (9027)	Good
Bacillus spizizenii (6633)	Good
Enterococcus faecalis (29212)	Good

Storage and Shelf Life

1. Store between 15°C-25°C to avoid water condensation. Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.
2. Under optimal conditions, the medium has a shelf life of 6 months. Use before expiry mentioned on the label.

Reference

1. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
2. Horwitz (ed.). 2007. Official methods of analysis of AOAC International, 18th ed., online. AOAC International, Gaithersburg, Md.
3. MacFaddin J. F., 2000, Biochemical Tests for Identification of Medical Bacteria, 3rd Ed., Lippincott, Williams and Wilkins, Baltimore.
4. U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product	Pack Size
205140410100	Nutrient Agar Plate	100 Plates

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.