Biomed Global

Rev: 0

Nutrient Agar Slant | Ready-to-use Media

a product by **Biomed MDX**

Effective Date: 15/11/2024

REF TB05N1011S

Intended Use:

General purpose medium used for maintaining microorganism and it can be used for the cultivation and enumeration of bacteria which are not fastidious.

Principle of the Procedure:

Nutrient agar slant's principle lies in its provision of a balanced nutritional environment conducive to the growth of a wide range of microorganisms, primarily bacteria. This is achieved through a combination of key components: peptone, derived from protein digestion, supplies essential nitrogen, amino acids, and other organic compounds; beef extract further enriches the medium with additional nitrogen, vitamins, minerals, and growth factors; and agar, a seaweed-derived solidifying agent, creates a semi-solid surface crucial for microbial colony formation. Further microbiological identification tests are necessary to confirm and diagnose the presence of microorganisms.

Product Summary:

Nutrient Agar slant a foundational medium in microbiology, was first formulated by the American Public Health Association in 1917. Recognizing the need for a standardized medium for examining various substances, including water, wastewater, food, and dairy products, the APHA established this formulation. Nutrient Agar's significance endures, as it remains a specified medium in contemporary microbiological examination protocols for a wide range of materials. Furthermore, it serves as a valuable resource for the cultivation and maintenance of non-fastidious microorganisms.

Formulation (Approximately *per Liter):

Beef Extract	3.0g	**Agar**	15.0g
Peptone	5.0g		

pH 6.8 +/- 0.2

**Adjust and/or supplemental as required to meet performance criteria*

Procedure

Materials Provided

Nutrient Agar Slant.

Materials Required but Not Provided

Ancillary culture media, reagents, and laboratory equipment as required.

Test Procedure

1. Streak the specimen as soon as possible after it is received in the laboratory with an aseptic technique.
2. Incubate plates at 35°C ± 2°C for 18 to 48 hours.
3. Observe the result according to user requirements.
4. Dispose of all used reagents and contaminated materials as infectious waste. Laboratories must handle and dispose of all waste safely according to regulations.

Results

After incubation, most plates will show an area of confluent growth. Because the streaking procedure is, in effect, a dilution technique, diminishing numbers of micro-organisms are deposited on the streaked areas.

Quality Control

Inoculate representative samples with the following strains. Incubate the inoculated plates at 35 ± 2°C for 18 to 48 hrs. to allow colonies to develop on the medium.

Strains	ATCC®	Growth Results
Escherichia coli	25922	Good growth
Pseudomonas aeruginosa	27853	Good growth
Enterococcus faecalis	29212	Good growth
Uninoculated plate	-	No growth

Transportation:

Temperature fluctuations may occur during transportation. However, these fluctuations do not affect the performance, quality, or safety of the media.

Storage and Shelf Life:

Upon receipt, store plates at 2 to 8°C, in their original sleeve wrapping until just before use. Avoid freezing and overheating.

The plates may be inoculated up to the expiration date (see package label) and incubated for the recommended incubation times.

Warning and Precautions:

For in vitro diagnostic use. For Professional Use Only. Do Not Reuse.

Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration.

Limitations of the Procedure

For identification, organisms must be in pure culture. Morphological, biochemical and/or serological tests should be performed for final identification[1-4].

Reference

1. Zimbro, M. J., Power, D. A., Miller, S. M., Wilson, G. E., & Johnson, J. A. (Eds.). (2009). Difco™ and BBL™ manual: Manual of microbiological culture media (2nd ed.). Becton, Dickinson and Company.

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Packaging Symbol

Symbol	Definition
REF	Catalogue number
IVD	In Vitro Diagnostic Medical Device
LOT	Batch code
	Date of manufacture
	Temperature limit
	Use-by date
	Keep away from sunlight
	Do not re-use
	Fragile, handle with care
	Consult instructions for use or consult electronic instructions for use
	Do not use if packaging damaged and consult instructions for use
	Manufacturer

Further Information:

For further information please contact your Biomed MDX representative.

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