Antibiotic Medium A pH 7.9 (Eur. Pharm.)

Art. No. 01-017

Also known as

Neomycin Assay Agar; Erythromycin Assay Agar; Medium C; Medium J

Specification

Antibiotic Medium A at pH 7,9 is used in microbiological antibiotic assays using agar diffusion technique.

Formula* in g/L

Peptone	6,00
Casein peptone	4,00
Yeast extract	3,00
Meat extract	1,50
Dextrose	1,00
Agar	15,00

Final pH 7,9 ± 0,1 at 25°C

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Suspend 30,5 g of powder in 1 litre of distilled water and bring to the boil stirring constantly. Distribute in suitable containers and sterilize in the autoclave at 121°C for 15 minutes.

Description

The Antibiotic Medium A at pH 7,9 is used as seed layer or as the base layer in the assay of erythromycin, gentamicin, kanamycin, neomycin, netilmycin, paromomycin, sisomicin, streptomycin, tylosin and vancomycin.

Technique

The agar diffusion technique for antibiotic assays is performed according to the methodology recommended in the pharmacopoeia used in each country. Antibiotic Medium A at pH 7,9 by Scharlau Microbiology is suitable for use with paper discs, punched-holes or cylinder methodology as its gel strength is specially adjusted for all these techniques.

References

- ARRET, B.D., P.JOHNSON & A. KIRSCHBAUM (1971) Outline details for Microbiological Assays of Antibiotics: Second revision. J. Pharm. Sci. 60(11):1689-1694.
- EUROPEAN PHARMACOPOEIA 7.0 (2011) 7th ed. §. 2.7.2 Microbiological Assay of Antibiotics. EDMH. Council of Europe. Strasbourg.
- ISO/TS 11133-1: 2009. Microbiology of food and animal feeding stuffs.- Guidelines on preparation and production of culture media. Part 1: General guidelines on quality assurance for the preparation of culture media in the laboratory.
- ISO/TS 11133-2: 2003 Corr. 2004. Microbiology of food and animal feeding stuffs.- Guidelines on preparation and production of culture media. Part 2: Practical guidelines on performance testing of culture media.
- SANCHO, J:, J.GUINEA & R. PARÉS (1980) Microbiología Analítica Básica. Ed. JIMS. Barcelona.
- U.S. PHARMACOPOEIA 31 /NATIONAL FORMULARY 26 (2008) Biological Tests and Assays. {81} Antibiotic Microbial Assays. USP Convention Ltd. Rockville. MD.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4°C to 30°C and <60% RH).

Quality control

Incubation temperature: 30 - 35°C
Incubation time: 24 - 48 h
Inoculum: 10-100 CFU. Spiral Plate Method (according to standard ISO/TS 11133-1/2)

Microorganism	Growth	Remarks
Bacillus subtilis ATCC 6633	Productivity > 0.70	-
Staphylococcus aureus ATCC 6538P	Productivity > 0.70	-
Staphylococcus epidermidis ATCC 12228	Productivity > 0.70	-
Micrococcus luteus ATCC 9341	Productivity > 0.70	-