

**Product :  
ANTIBIOTIC MEDIUM A at pH 7,9 (Eur.  
Pharm.)**
**Also known as**

Neomycin Assay Agar; Erythromycin Assay Agar; Medium C; Medium 11; Medium J; AM11 ; Antibiotic Medium 11

**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 L 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 is suitable for use with paper discs, punched-holes or cylinder methodology as its gel strength is specially adjusted for all these techniques.

**Quality control**

**Incubation temperature:** 30-35°C **Incubation time:** 24 ± 3h

**Inoculum:** Practical range 50-100 CFU (Productivity). Spiral Plate Method.

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

**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 10.0 (2020) 7th ed. §. 2.7.2 Microbiological Assay of Antibiotics. EDMH. Council of Europe. Strasbourg.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and 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).